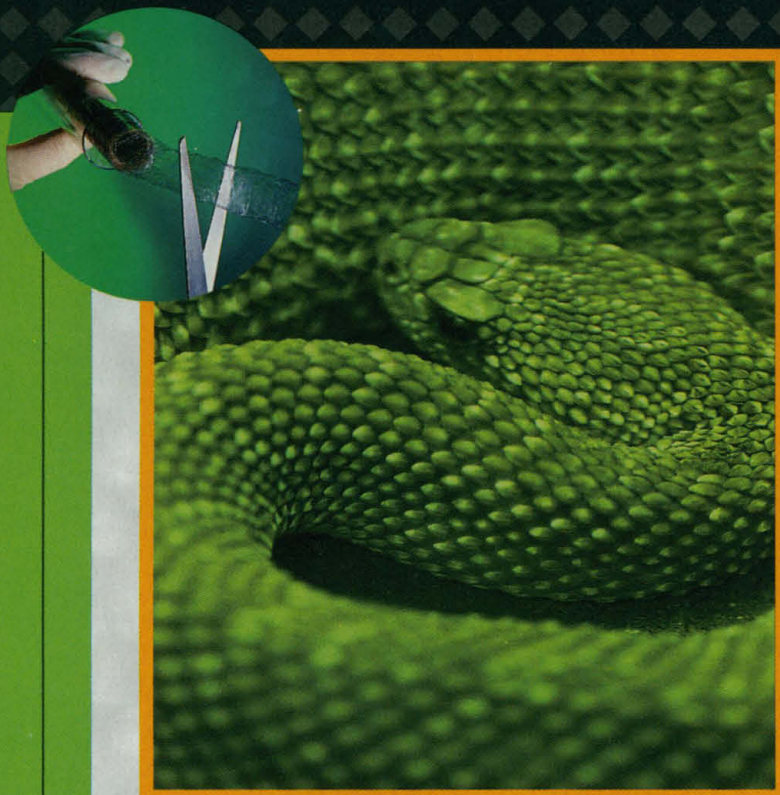


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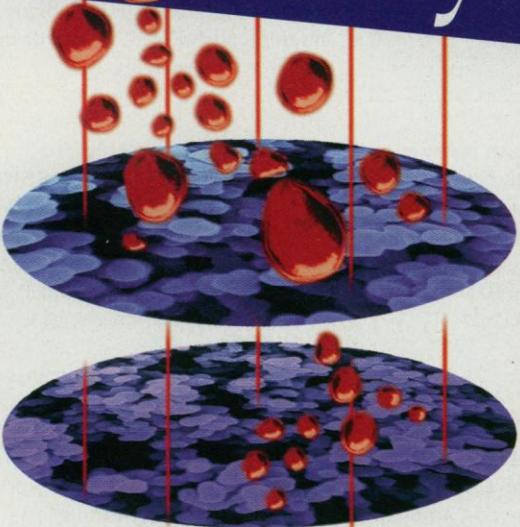
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(continued from page 305)

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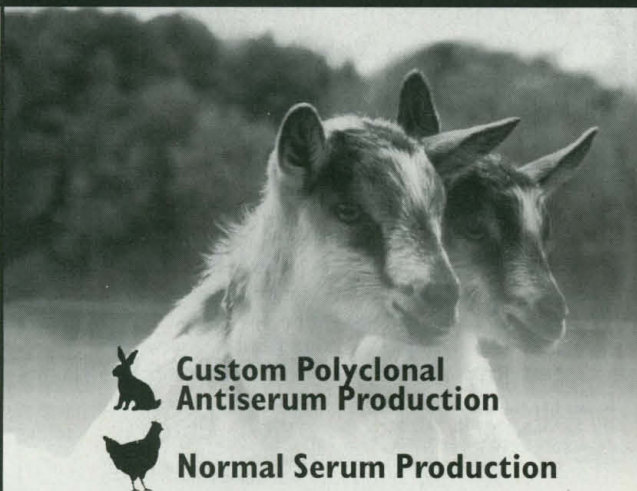
etic separation and for successful amplification reactions. Genomic DNA yield from human whole blood is 30 to 40 μ g of DNA per milliliter of blood. **Molecular Research Center.** For information call 800-462-9868 or circle 149 on the Reader Service Card.





Literature

A poster is available that summarizes the current understanding of the matrix metalloproteinase (MMP) activation cascade. It covers the key areas of wound healing, arthritis, tumor invasion, growth and vascularization, and uterine expression. **Amer-sham Life Sciences.** For information call +44 (0) 1494 542947 or circle 150 on the Reader Service Card.

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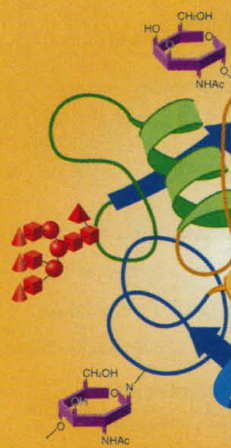
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
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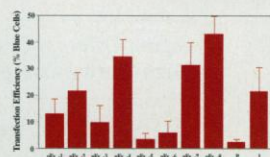


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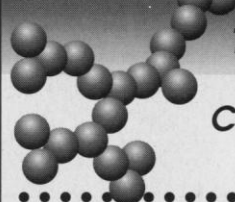
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An, Z. et al. *Clinical and Experimental Metastasis*, 15, 184-195, 1997.
An, Z. et al. *Anticancer Research*, 16, 2546-2552, 1996.
Wang, X. et al. *Cancer Research*, 54, 4726-28, 1994.
Holzman, D. *Journal of the National Cancer Institute* 88, 396-397, 1996.
Hoffman, R., *J. Cellular biochem*, 56, 1-4, 1994.

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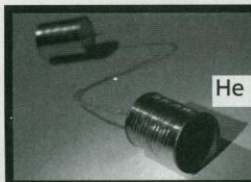
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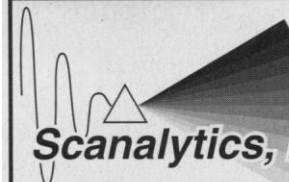
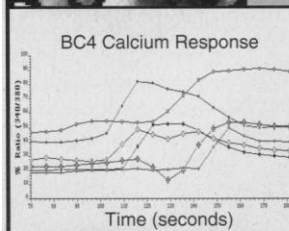
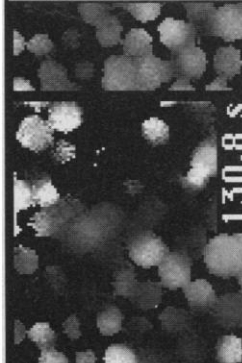
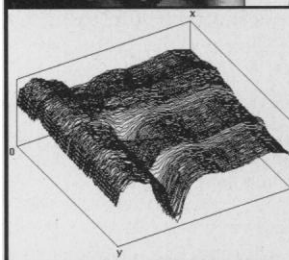
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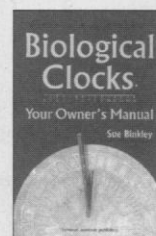
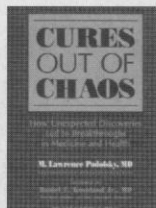
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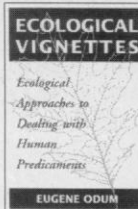
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IRA HERSKOWITZ, Discussion Leader
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MACHINES THAT PRODUCE DNA, RNA, AND PROTEIN

STEVE McKNIGHT, Discussion Leader
MIKE O'DONNELL, *DNA Replicase*
TOM CECH, *Telomerase*
ROBERT TJIAN, *Basal Transcription Complex*
CYNTHIA WOLBERGER, *Multimeric DNA-Binding Proteins*

TUESDAY, OCTOBER 27

MACHINES THAT TRANSDUCE SIGNALS

SUSAN TAYLOR, Discussion Leader
TONY PAWSON, *Protein Modules*
AL GILMAN, *Heterotrimeric G Proteins*
PIERRE CHAMBON, *Nuclear Receptor Superfamily*
MICHAEL BROWN, *SREBP Pathway*

MACHINES THAT MOVE MOLECULES

HANS DEISENHOFER, Discussion Leader
ULRICH HARTL, *Molecular Chaperones*
PETER WALTER, *Unfolded Protein Response Pathway*
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POSITIONS OPEN

The Laboratory of Molecular Pharmacology (LMP), Division of Basic Sciences, of the National Cancer Institute, National Institutes of Health, invites applications for a **TENURE-TRACK POSITION** in molecular therapeutics. The applicant should have a potential to develop an independent basic research program in molecular and cellular biology, with emphasis on the development of novel strategies for the treatment of human cancer. Candidates with confirmed expertise with experimental systems dealing with specific oncogene or tumor suppressor gene alterations, studies on apoptosis, cell cycle regulation, DNA damage/repair, and signal transduction are encouraged to apply. This position is available for a Ph.D., M.D., or M.D.-Ph.D. with a salary commensurate with education and experience. A one- or two-page statement of research interests and goals should be submitted in addition to three letters of recommendation and a curriculum vitae to: Ms. Althea Jackson, Laboratory of Molecular Pharmacology, National Cancer Institute, NIH, Building 37, Room 5D02, 37 Convent Drive MSC 4255, Bethesda, MD 20892-4255. Telephone: 301-435-8232; FAX: 301-402-0752; e-mail: tiaj@box-t.nih.gov. Applications must be received within one month of this announcement. *The National Cancer Institute is an Equal Opportunity Employer. Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.*

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Tenure-track positions at the **ASSISTANT** or **ASSOCIATE MEMBER** levels are available in the Immunology Program at Sloan-Kettering Institute (SKI). Candidates should have either the ability to develop a strong, independent research program, or a proven record as an Independent Investigator, depending on the level of appointment. The Immunology Program has an active faculty whose research interests encompass transplantation, immunogenetics, T lymphocyte development and function, immunochemistry, gene regulation, and tumor immunology and biology. Interactions with faculty in Memorial Sloan-Kettering Cancer Center, including other SKI faculty and the clinical faculty of Memorial Hospital, are encouraged. Appointment at the Cornell University Graduate School of Medical Sciences is possible. Support will be provided for the Investigator to establish or re-establish his/her laboratory.

Applicants should send a curriculum vitae, bibliography, statement of research interests, and names of three references to:

Dr. Alan Houghton
Chairman, Immunology Program
Sloan Kettering Institute
1275 York Avenue
New York, NY 10021

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FACULTY POSITION VISION SCIENCE

University of Alabama at Birmingham

A faculty position at the **ASSISTANT, ASSOCIATE,** or **FULL PROFESSOR** level is available at University of Alabama at Birmingham (UAB), a Carnegie Research I institution. Candidates must have a doctoral degree, an established research program, and, at the more senior levels, a record of extramurally funded research. Research that applies cellular, molecular, or imaging techniques to the study of sight-threatening diseases is of particular interest. Salary, space, and start-up funds are competitive with national levels.

Applicants should send a curriculum vitae with names of three references and a statement of research interests to: **Dr. Paul D. R. Gamlin, Chair, Faculty Search Committee, Vision Science Research Center, 626 Worrell Building, University of Alabama at Birmingham, Birmingham, AL 35294-4390. Website: <http://spectrum.vsrc.uab.edu/>. UAB is an Equal Opportunity Employer.**

POSITIONS OPEN

Environmental Studies Faculty. Shepherd College has a full-time, **TENURE-TRACK FACULTY POSITION** in environmental studies available beginning in August 1998, subject to final approval of funding. The environmental studies program is interdisciplinary with options in environmental science and resource management. We seek a dynamic individual to teach in the program, expand the program into the area of freshwater stream ecology with a strong field emphasis, and develop liaisons with industry and nearby state and federal agencies. Opportunities for collaborative research exist with the National Conservation Training Center (Fish and Wildlife Service), the USGS Biological Research Division, the Conservation Fund Freshwater Institute, and the National Small Flows Clearinghouse. A Ph.D. or terminal degree is required. Shepherd College is located approximately 65 miles from Washington and Baltimore and is a public baccalaureate institution. The application deadline is May 1, 1998. Send a résumé and arrange for at least three letters of references to be sent to: **Director of Human Resources, Shepherd College, Shepherdstown, WV 25443.** For more information contact: **Dr. Donald Henry, Chair, Division of Natural Sciences and Mathematics, Shepherd College, Shepherdstown, WV 25443. Telephone: 304-876-5106; e-mail: dhenry@shepherd.wvnet.edu.** *Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.*

UNIVERSITY OF FLORIDA

The Division of Hematology/Oncology in the College of Medicine, Department of Medicine seeks to fill the **PRICE EMINENT SCHOLAR CHAIR OF BASIC SCIENCE**. We are seeking to fill this tenure-track position with a scientist, M.D., Ph.D., or M.D.-Ph.D., with experience as a Cell Biologist to conduct basic research in one or more areas of hematopoiesis, cytokine regulation and hematopoietic progenitor cells, interaction of stem cells and bone marrow stroma, differentiation between normal and malignant hematopoietic stem cells, purification of hematopoietic stem cells, purification of hematopoietic progenitor cells of different lineages, and the characterization of primitive hematopoietic progenitors of fetal origin, adult bone marrow, and peripheral blood. Salary and fringes negotiable and commensurate with experience. Recruiting deadline: June 15, 1998. Anticipated starting date September 1, 1998. Applicants should send a letter of interest and a copy of their curriculum vitae to: **John R. Wingard, M.D., Chairman, Price Eminent Scholar, Chairman Search Committee, Professor of Medicine, Director Bone Marrow Transplant Program, University of Florida, Box 100277, JHMHC, Gainesville, FL 32610-0277. An Equal Employment Opportunity/Affirmative Action Employer.**

Clarke College, a growing, Catholic, coeducational, liberal arts college in Dubuque, Iowa seeks qualified candidates for a nine-month, full-time, **TENURE-TRACK POSITION** in its six-person Biology Department beginning in the fall of 1998. Earned Ph.D. required. Candidates should be specialists in neuroscience with a strong background in human physiology to teach courses for physical therapy and biology majors. Other responsibilities include general biology with attendant laboratories and supervision of undergraduate research projects. Postdoctoral experience preferred. Screening of candidates begins immediately and continues until the position is filled. Send a letter of introduction, copies of graduate and undergraduate transcripts, a current curriculum vitae/résumé, three reference letters, and the names, addresses, and telephone numbers of three references to: **Dr. Mary Murphy, B.V.M., Chair-Biology Department, Clarke College, 1550 Clarke Drive, Dubuque, IA 52001-3198. Visit our website: www.clarke.edu or e-mail the Department Chair at [e-mail: mmurphy@keller.clarke.edu](mailto:mmurphy@keller.clarke.edu).**

FACULTY POSITION DEPARTMENT OF PEDIATRICS MOUNT SINAI SCHOOL OF MEDICINE

RESEARCH ASSISTANT PROFESSOR position is available in The Department of Pediatrics at The Mount Sinai School of Medicine. A Ph.D. scientist is sought to conduct investigations of intestinal gene regulation (*J. Clin. Invest.* 95:745; *Am. J. Physiol.* 271:G377; *J. Biol. Chem.* 272:31006). Candidates must have experience in promoter analysis including transgenics animal studies. Send cover letter, curriculum vitae, relevant reprints, and names of three references to: **Dr. Benjamin L. Schneider, Department of Pediatrics, Mount Sinai Medical Center, Box 1656, One Gustave L. Levy Place, New York, NY 10029.**

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FACULTY POSITIONS

Center for Molecular Medicine Maine Medical Center Research Institute

The newly created Center for Molecular Medicine is currently undergoing a vigorous expansion. The Center's major focus will be on the molecular mechanisms of human disease including diseases of the cardiovascular system, bone and mineral metabolism, and cancer. Applications are invited at the Assistant, Associate and Full Member level. Individuals using modern cell, molecular and/or genetic (vertebrate or invertebrate) methods to elucidate molecular mechanisms of human disease are encouraged to apply. Center faculty will have access to excellent resources including generous start-up funds and space in a new state-of-the-art research building presently under construction. In addition, the successful candidate will be encouraged to interact with existing clinical programs at the Maine Medical Center.

The successful candidate will be expected to establish an independent basic research program that will attract extramural funding and will complement existing research programs at the Center. These include characterization of novel secretion pathways for signal peptide-less proteins, development of novel inhibitors or tumor development, pathobiology or vascular remodeling, functional characterization of growth factor, cytokine and cell fate determinant signaling, and the molecular genetics of human bone development, tissue/organ repair and neoplasia.

Rank and salary will be commensurate with qualifications and experience. The Portland area offers an environment rich in cultural and recreational opportunities. Applicants should send a curriculum vitae, three letters of reference and a brief statement of research interests to: **Dr. Robert E. Friesel, Search Committee Chair, Maine Medical Center Research Institute, 125 John Roberts Road, Suite #12, South Portland, ME 04106.** We are an equal opportunity employer strengthened by the diversity of our professional community.


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POST-DOCTORAL POSITIONS

Two Post-Doctoral positions are available immediately to study the role of neutral cell adhesion molecules in the migration of neutrophils during development.

Applicants with expertise in modern cell biology, immunocytochemistry and molecular biology are preferred. The Shriver Center, located in suburban Boston, is affiliated with Massachusetts General Hospital (MGH) and Harvard Medical School. The selected candidates will have joint appointments at MGH and Harvard. Please send curriculum vitae and names of three references to **Dr. Firoze Jungalwala, Biomedical Sciences, Eunice Kennedy Shriver Center, 200 Trapelo Road, Waltham, MA 02254.** Phone (781)642-0136 Fax (781) 893-4824 Email: FJungalwala@Shriver.org

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SIGA Pharmaceuticals Inc., an exciting new biotech company whose research and development activities are located in Corvallis, Oregon is currently seeking qualified individuals to fill five new positions at the Research Scientist I level. SIGA is at the cutting edge in new vaccine technology and novel anti-infectives and will provide qualified scientists with an opportunity unparalleled in today's industry setting.

Qualified applicants will have a Ph.D. in Microbiology, Molecular Biology, Immunology, or a related life science. Two years postdoctoral experience is required and experience working in an industry setting is preferred. The best applicants will be self-motivated, have strong interpersonal and organizational skills, the ability to work in a dynamic group setting, and the desire to succeed.

Research Scientist I — Vaccine Development (VDRS1) — Bacteriologist

The successful candidate will have responsibility for new antigen discovery, optimizing current vaccine candidates, and the design of animal studies to assess these candidates. Experience in molecular pathogenesis, antigen identification and isolation, and immunology are preferred. Oversight and training of junior scientists will be required.

Research Scientist I — Vaccine Development (VDRS2) — Immunologist

The successful candidate will have responsibility for the design and implementation of studies to enhance and dissect the immune response to various vaccine candidates. Experience in all facets of immunology, particularly mucosal immunology and cytokine networks therein, as applied to vaccine research, is desired. Oversight and training of junior scientists will be required.

Research Scientist I — Drug Discovery (DDRS1) — Molecular Biologist

The successful candidate will be responsible for identification and characterization of novel antimicrobial targets, assist in assay development and high-throughput screening of inhibitor libraries. Oversight and training of junior scientists will be required.

Research Scientist I — Drug Discovery (DDRS2) — Biochemist

The successful candidate will be responsible for biochemical characterization and purification of novel antimicrobial candidates, assay development, implementation and high-throughput screening. Oversight and training of junior scientists will be required.

Research Scientist I — Drug Discovery (DDRS3) — Structural Biologist

The successful candidate will be responsible for biochemical and structural characterization of novel antimicrobials. You should be familiar with cutting-edge technology in molecular modeling, structure-based design, and rational drug design. Oversight and training of junior scientists will be required.

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Postdoctoral positions are available for NIH-funded research programs investigating disease risk genes in rheumatoid arthritis. The focus of this research is to identify functional implications of immune response gene polymorphisms on the inflammatory process, specifically, the genetic control of oligoclonal T cell expansion. Candidates should hold a Ph.D., M.D., or D.V.M. degree and should have training and experience in molecular and cellular techniques. Send a curriculum vitae, description of research experience, and the names and addresses of three references to:

Dr. Jorg J. Goronzy
(goronzy.jorg@mayo.edu)

or

Dr. Cornelia M. Weyand
(weyand.cornelia@mayo.edu)

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Biochemist - Protein Chemistry

A candidate is sought with broad based experience in protein chemistry and biochemistry. Responsibilities will include the purification and characterization of proteins from natural and recombinant sources. You must have the ability to interact with a wide range of scientist in a team oriented environment and have excellent communication skills. Familiarity with analytical biochemistry, fermentation and/or molecular biology is a plus. A Ph.D. degree in Protein Chemistry or related field with 3 years of work experience is required.

Code: SD-RW

Bioinformaticist

A candidate is sought with experience in the field of bioinformatics. The candidate must also have experience in UNIX system administration, Web-related programming, and database development. Candidate will be responsible for the set-up and operation of various computational biology software packages, and sequence database development. Some background in biology/molecular biology is desirable. A BS/MS degree in computer science or related field plus 3 years of work experience is required. **Code: SD-KA**

Molecular Biologist - Yeast Genetics

A candidate is sought with experience in molecular biology and yeast genetics. The successful candidate will join the Yeast Genetics group involved in gene discovery using novel genetic methods, engineering of yeast cell-based assay systems, and the functional analysis and expression of proteins in yeast. Candidate should have a BS/MS degree in molecular biology or a related field and 3 years of work experience. **Code: SD-JT**

Molecular Biologist - Insect and Mammalian Cell Culture

A candidate is sought to join our Eukaryotic Gene Expression Group, where the primary focus is to establish engineered cell lines to support ongoing drug discovery efforts. A broad-based knowledge of insect and mammalian cell culture techniques is required.

In addition, background should include all common molecular biology techniques, with emphasis on the construction and optimization of insect and mammalian cell expression vectors. Familiarity with basic protein

biochemistry would be a plus. Proven ability to work independently and strong written and oral communication skills are essential. A BS/MS degree in biology or a related field and 3-5 years experience is required.

Code: SD-JOB

Biochemist - Protein Analysis

A candidate is sought to join our Protein Analysis Group, where the primary focus is to characterize macromolecular interactions to support drug discovery projects. Familiarity with protein purification and analysis is essential with an emphasis on antibody/antigen interactions. Basic molecular biology experience and a working knowledge of epitope mapping and phage display technology would be an advantage. Candidates must have a proven ability to work independently and have strong written and oral communication skills. A BS/MS degree in biochemistry or a related field and 1-3 years experience is required. **Code: SD-KON**

Biologist - Transgenic Animals

A candidate is sought that will have experience in a variety of animal care and associated laboratory procedures, including general husbandry, tagging of mice, isolation of tissues, preparation of DNA from tissue isolates, hormone administration, animal surgery and/or microsurgery. The candidate will have the ability to learn a variety of laboratory procedures (e.g. PCR, Western blotting) and embryo isolation, manipulation and cryopreservation. Strong written and oral communication skills are essential. BS in Biology, Animal Science or related experience is required. **Code: SD-JD**

Molecular Biologist - Novel Chemotherapeutics

The successful candidate will assist in research to develop effective and novel chemotherapeutics. The job entails both experimental and routine laboratory techniques, including protein purification and analysis, cell culture, and DNA manipulation and expression. Requires the ability to work within a group and independently. BS/MS in biochemistry or related field is required and an interest in cancer research.

Code: SD-AUG

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Qualifications include a PhD and a minimum of 3-5 years' postdoctoral experience (preferably industrial) in Biochemistry, Cell Biology, Molecular Pharmacology or a related field, plus demonstrated creativity and productivity as evidenced by a strong publication record. Excellent oral and written communications skills and the ability to effectively interact in a multi-disciplinary team are key. An extensive knowledge of and laboratory experience with receptor mediated signal transduction pathways and receptor-ligand interactions using molecular biology and pharmacologic methods is required, as is experience with stable gene expression in mammalian cells.

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Senior Scientist

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The goal for this position will be the establishment of a research program that will define the functional basis of the human immune response to novel vaccines. It is envisioned that this research endeavor will lead to a fundamental understanding of the protective immune responses required for the vaccine targets of interest and will therefore result in the design of appropriate experimental vaccines.

The successful candidate will possess a Ph.D., MD, or equivalent, with at least five years of post-doctoral experience with a publication record that reflects independent scientific thinking and problem-solving. Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter and the names of three references including ad # B-146 to: **Merck Research Laboratories, P.O. Box 4, MRL Human Resources, WP42-2, West Point, PA 19486.** Only candidates considered for interviews will receive responses. We are an Equal Opportunity Employer, Principals only, M/F/D/V.



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In another position you must have a Ph.D. and postdoctoral training in pharmacology and molecular endocrinology with expertise in morphological techniques including immunocytochemistry and in situ hybridization using double-triple labeling techniques.

Both positions require strong analytical, problem-solving and presentation skills in addition to the ability to direct the work of others and collaborate across departments. Pharmaceutical experience is preferred.

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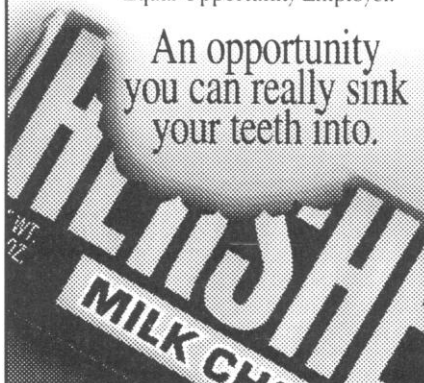
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Few names in America have such a desirable reputation as Hershey's Foods Corporation. For over 100 years, our industry leading position has been guided by one simple principle — a commitment to the highest standards of quality. As a result, sales have impressively grown for the past 31 years. Part of this unparalleled success comes from our dedication to the advancement of scientific and technical knowledge.

Presently, we have the need for a dynamic individual to initiate and lead basic and applied research in Fats and Oils Technology at our Technical Center in Hershey, PA.

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To qualify, you must have a Master's degree in a related field along with 6-10 years of relevant experience. A Ph.D. in Chemistry, Biochemistry or related field along with 4-8 years experience in the food industry is preferred. You should also possess thorough knowledge of the chemistry and physical chemistry of fats and oils, as well as practical experience in physical and thermal analysis of fats and butters. Experience in food processing and formulation also expected. Knowledge of advanced techniques including differential scanning calorimetry and X-ray analysis; lipid synthesis, rearrangement and structural determination; formulating chocolates and coveratures; and in making laboratory prototypes is highly desirable. Strong supervisory, written, oral and presentation skills required. For immediate consideration, please send resume with salary history, to: Attn: SPR, Hershey Foods Corporation, 100 Crystal A Drive, Box 810, Hershey, PA 17033-0810; Fax 717-534-7883. Visit our web site at www.hersheys.com. Equal Opportunity Employer.



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BS/MS Scientist Cellular/Molecular Immunology

Our Immunology group is seeking a research scientist to join our drug discovery team in the area of immune enhancement/cancer immunotherapy and immune suppression/organ transplantation. Responsibilities include development of assays for validation of molecular targets and identification of novel immune regulators. Desirable experience/expertise includes cellular and molecular immunology assays, protein biochemistry and enzymology, receptor binding and signal transduction, flow cytometry, tissue culture and computer skills. Candidates should have a BS or MS plus 3+ years' relevant experience. **Job Code: 2571**

BS/MS Scientist Clinical Measurements

Working in a lab that identifies novel human disease relevant markers and develops and validates new biochemical assays for these markers, you will work on assays in support of drug development. BS/MS or equivalent in Biochemistry, Immunology or Protein Chemistry plus 2-5 years' relevant experience required. Experience in antibody screening and isolation, immunoassay development and validation (ELISAs), protein purification, RNA isolation from tissues, quantitative RT-PCR, general biochemical and molecular biology techniques and antibody isolation from phage display libraries preferred. **Job Code: 2577**

BS/MS Scientist Molecular Biology

Utilize various tools of molecular biology (recombinant DNA cloning, protein expression and purification, tissue culture, enzyme biochemistry) to identify and implement new targets in the areas of immune regulation. With minimal laboratory supervision, you will perform and interpret experimental protocols and results and enter data into appropriate computer programs for statistical analysis, graphing and archiving. BS or equivalent in Molecular Biology or Biochemistry, DNA cloning, protein biochemistry and tissue culture experience required. MS or equivalent in Molecular Biology or Biochemistry and ability to dissect novel signaling pathways preferred. **Job Code: 2568**

Ph.D. Research Scientist Molecular Biology

Supervise a laboratory focused on the identification of therapeutic approaches to immune and inflammatory conditions by using molecular biology techniques to validate novel targets and generate new screens and cell-based models. Ph.D. and at least 3 years' postdoctoral experience or equivalent in relevant field, and a strong publication record required. Strong background in molecular techniques, protein expression, cell culture, computer analysis of nucleic acid sequences, and a working knowledge of hematopoiesis and immune regulation preferred. **Job Code: 2569**

BS/MS Chemists Medicinal Chemistry/ Mammalian Health

Conduct synthesis, purification and characterization of novel, small molecule biological effectors toward the research of cancer, immunology, infectious diseases, cardiovascular and metabolic diseases and neuroscience. Qualified candidates will have a degree in a relevant field and a strong theoretical background in synthetic organic chemistry, including advanced courses. Knowledge and experience in isolation, separation, organic reaction mechanisms and identification techniques utilizing IR, NMR and Mass Spectroscopy are required. Research experience, particularly in undergraduate research, is highly desirable. **Job Code: 2570**



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fax 212-832-9376, e-mail cancerres@aol.com.

NEUROSCIENCE THE EJLB FOUNDATION SCHOLAR RESEARCH PROGRAMME

The EJLB Foundation awards each year up to seven (7) grants for research projects in all areas of neuroscience that pertain directly or indirectly to schizophrenia and mental diseases. Specific areas of support in the past have included: developmental neurobiology, synaptic mechanisms, systems and cognitive neuroscience, and clinical studies on the genetic and physiopathologic aspects of neurological and psychiatric disorders.

Eligibility for such grants is restricted to young scientists who are pursuing an independent research career and have given evidence of having significant potential. It is also a requirement that these scientists (i) have earned an M.D. and/or a Ph.D. degree; (ii) have completed their postgraduate training; and (iii) have been admitted after June 15, 1993, as faculty members of a leading university, or an affiliated nonprofit research centre, in Canada or elsewhere in the world.

Each grant is of CAN\$300,000, is disbursed over three (3) years, and is nonrenewable. The next closing date for receipt of letters of intent is May 1, 1998.

Full details regarding this programme and required letter of intent forms may be obtained from:

The EJLB Foundation
1350 Sherbrooke Street West-Suite 1050,
Montréal, Québec H3G 1J1 CANADA.
Fax (for inquiries only) 514-843-4080.



St. Jude Children's
Research Hospital
ALSAC - Danny Thomas, Founder

POSTDOCTORAL POSITION SIGNAL TRANSDUCTION BY MITOGENIC RECEPTORS

A postdoctoral position is available to study signal transduction pathways activated by neuropeptide and growth factor receptors in brain tumors. The role of these mitogenic receptors in stimulating the growth of astroglial cells is being investigated using biochemical, pharmacological, and molecular approaches (see: Cancer Research 56:4983-4991, 1996; Molecular and Cellular Endocrinology 130:119-130, 1997; Cell Growth and Differentiation 8:1225-1240, 1997). Candidates should have a strong research experience and a recent Ph.D. in Molecular Biology, or a related field. Interest in cancer research is a plus.

St. Jude Children's Research Hospital (Danny Thomas, Founder) is an outstanding research center for biomedical research and provides an exceptional environment for scientific achievement and career development. Stipend and benefits are highly competitive.

Send a letter of interest, curriculum vitae and names of three references to: Dr. M. Sharif, Department of Molecular Pharmacology, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105. Fax: (901) 521-1668. Please visit our website: www.stjude.org

An Equal Opportunity/Affirmative Action Employer

MEMORIAL UNIVERSITY OF NEWFOUNDLAND NUTRITIONAL BIOCHEMISTRY

Applications are invited for a tenure-track faculty position in the field of Nutritional Biochemistry. The Biochemistry Department of Memorial University of Newfoundland has research strength in the areas of protein, amino acid, and lipid metabolism; the role of anti-oxidants in the diet; and micronutrient requirements and metabolism in the newborn. It is expected that the successful applicant will establish a research program in one of these areas and teach in the undergraduate and graduate programmes. The selected applicant must be successful in obtaining a Scholarship from the Medical Research Council of Canada through its Regional Partnership Program or a similar Scholarship from another agency. The appointment will be made at the Assistant Professor rank.

Memorial University is committed to the principle of equity in employment. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Applications, together with a curriculum vitae, names of three referees (including their fax numbers), three representative publications, and a brief indication of the proposed research direction, should be sent to arrive before May 31, 1998, to:

Dr. J. T. Brosnan, Head
Biochemistry Department
Memorial University of Newfoundland
St. John's, Newfoundland, Canada
A1B 3X9

Questions concerning application should be directed to Dr. Brosnan at the address above or by telephone at (709)737-8529, Fax (709)737-2422 or by e-mail to jbrosnan@morgan.ucs.mun.ca.

HEAD OF SOFTWARE SYSTEMS DEVELOPMENT

Clinical Informatics

AXYS Pharmaceuticals is a leader in the integration of drug discovery technologies from gene identification through clinical development. Genetic information will soon be used to predict drug efficacy, safety and utility. AXYS is a front-runner in developing this new and exciting field of pharmacogenomics.

We currently have an opening for a person who will design and implement the databases and software tools which will enable our pharmacogenomics program to be the premier platform for the integration of clinical and genetic information. In this challenging position, you will be responsible for the system design and management of the bioinformatics platform for a pharmacogenomics database that integrates clinical trial and genetic information. In addition, you will supervise software engineers and participate in meetings with outside collaborators concerning the design and function of the database platform. Prefer a PhD or MD in Clinical Medicine, Pharmacology, Genetics or Biology with related programming experience in C. Familiarity with Java and web interfaces and experience with Oracle/Sybase databases are essential.

As a publicly held corporation, AXYS is proud to offer a stimulating scientific setting along with a highly competitive salary and benefits package. Please mail or fax your resume to: AXYS Pharmaceuticals, Inc., Attn: HR, SCI98-117, 11099 N. Torrey Pines Rd. #160, La Jolla, CA 92037. Fax: (619) 452-6653. Visit our website at www.axyspharm.com. EOE.

AXYS
Pharmaceuticals

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Director Environmental Carcinogenesis Division National Health and Environmental Effects Research Laboratory Research Triangle Park, North Carolina

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Director, Environmental Carcinogenesis Division (ECD), National Health and Environmental Effects Research Laboratory (NHEERL). ECD is a multidisciplinary carcinogenesis program with an EPA staff of 56 employees. The Division is a focal point for planning, conducting, coordinating, supporting, and evaluating research to improve cancer risk assessment. This position, located in the Research Triangle Park, North Carolina, is a permanent, full-time position with a salary range of \$76,456 to \$99,397, per annum, commensurate with qualifications. The selected candidate will be eligible for a full benefits package, including relocation expenses, health insurance, life insurance, retirement, and vacation and sick leave benefits. *United States citizenship is required.*

The incumbent will direct and manage this research program, which includes an intramural research program and postdoctoral/predoctoral programs. The incumbent provides scientific and managerial leadership of the program, develops the program to meet the evolving needs of the EPA, presents the program to both EPA and non-EPA audiences, develops and manages budgets, supervises the staff, directs the progress of the program, and ensures the highest possible scientific quality and productivity. The preferred candidate for this position would possess the following qualifications: (1) advanced degree in a toxicological, biological, biochemical, or medical discipline; within any of these areas the candidate must have at least six years of professional research experience, and applicable graduate coursework may be substituted for a portion of the preferred experience; (2) experience as a supervisor of a scientific and professional staff; (3) recognized scientific expertise as evidenced by multiple peer-reviewed publications, invited presentations at national and international meetings and panels, and involvement with international organizations; and (4) proven ability to provide leadership in directing the development and progress of a creative and effective multidisciplinary carcinogenesis research program.

If you are interested in this position, please send a curriculum vitae and a letter describing your research interests, career goals, and names of three references to: **Dr. Harold Zenick, National Health and Environmental Effects Research Laboratory (MD-87), U.S. EPA, Research Triangle Park, NC 27711.** Please respond to this advertisement no later than May 29, 1998. After all responses are reviewed, candidates will receive written notice of the next stage of the application process.

*The U.S. Environmental Protection Agency is an Equal Employment
Opportunity Employer.*

THE CLEVELAND CLINIC THE LERNER RESEARCH INSTITUTE

Faculty Position in Prostate Cancer Biology

We are seeking an individual at the level of Associate or Full Professor to establish a basic laboratory research program in prostate cancer biology. The position is jointly sponsored by the Lerner Research Institute and the Department of Urology - a partnership that has previously established research programs in renal cell carcinoma and transplantation. The successful candidate (Ph.D. or M.D.) will possess an outstanding national reputation as a Basic Scientist using state-of-the-art cellular, molecular and genetic approaches to study prostate cancer biology. Applicants should have a major interest in cancer genetics, molecular genetics or molecular pathology and would interact with an existing epidemiological team studying prostate cancer. Generous support and a highly competitive salary and fringe benefits will be provided. The Lerner Research Institute of the Cleveland Clinic, under the leadership of Dr. George Stark and comprising over 90 independent investigators and over 600 employees, has a long-standing commitment to excellence in basic biomedical research with an annual budget in excess of \$50 million. The Department of Urology is a nationally recognized center of excellence in urologic disease.

Applications (including curriculum vitae and names and addresses of three references) should be sent to:

**Bryan R.G. Williams, Ph.D., Chairman, Department of Cancer Biology-
NN10, Lerner Research Institute, Cleveland Clinic Research Institute, 9500
Euclid Avenue, Cleveland, OH 44195. The search committee will receive
applications through August 1, 1998. The Cleveland Clinic is an equal opportunity
employer.**

INFECTIOUS DISEASES RESEARCH

*At Lilly, we are building on our past
and defining the future.*

In 1876, Colonel Eli Lilly set out to build his pharmaceutical company into a global leader in the field of research and the life sciences. Today, we personify our founder's vision and are passionate in our desire to create health care solutions which will help people live fuller, healthier lives. Today, 31,000 people in more than 160 countries worldwide continue to make that desire a reality.

Lilly's Division of Infectious Diseases Research has a long and productive history of introducing innovative products for the treatment of human infections. Our programs include significant efforts in the bacterial, fungal and viral areas. We are recruiting the best minds available to help us in this pursuit.

Ph.D. and BS/MS

Biochemists

We are seeking scientists with proven expertise in biochemistry. Individuals with experience with microorganisms are preferred. These individuals will become colleagues on multidisciplinary teams committed to identifying, characterizing, purifying and exploiting novel antimicrobial/antifungal targets. Experience purifying and characterizing proteins, developing functional assays for proteins and studying the kinetics and mechanisms of inhibition of enzymes and proteins is critical. Knowledge of microbiology, microbial physiology and protein biochemistry is highly desirable.

Post Doctoral Fellows

We are looking for creative individuals in a variety of scientific areas to explore emerging aspects of human infectious diseases. A Ph.D. in Biochemistry or related field is required. Focus areas in Infectious Diseases Research include hepatitis viruses, important human fungal pathogens, and antibiotic-resistant Gram-positive bacteria. Lilly postdoctoral fellows gain sound practical experience and focused training that will significantly expand their scientific knowledge and abilities in drug discovery.

For confidential consideration, please send your resume and cover letter indicating the position of interest to: **Eli Lilly and Company, Infectious Diseases Division, ADSCMPD04, DC 1818, Lilly Corporate Center, Indianapolis, IN 46285.** We will be at the **American Society for Microbiology meeting in Atlanta from May 18-20.** If you wish to be considered for a preliminary interview at this meeting, please indicate this in your cover letter.

We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace. For other opportunities at Eli Lilly and Company, please contact our Job Bank at: <http://www.lilly.com>.

Lilly
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WORLDWIDE HEALTH CARE SOLUTIONS

The Department of Geosciences PRINCETON UNIVERSITY

announces the 1998 competition for the
HARRY HESS FELLOWS

An Honorable Postdoctoral fellowship program named for Harry Hess has been established to provide opportunities for outstanding geoscientists to work in the field of their choice. Research may be carried out independently or in collaboration with members of the Geosciences Department. The Fellowships provide an annual stipend along with an allowance for research support. The Fellowships are awarded for one year with a nominal starting date in September of 1998. There is the possibility of an additional year at Princeton by mutual agreement. Applicants will also be considered for available postdoctoral positions. Current areas of research include:

- Geochemistry
- Biogeochemical Cycles
- Paleontology
- Mineralogy
- Petrology
- Structural Geology
- Geophysics
- Seismology

Candidates should send a letter of application and the supporting materials listed below to the **HESS FELLOWS COMMITTEE, c/o Prof. George Philander, Princeton University, Department of Geosciences, 113 Guyot Hall, Princeton, NJ 08544.** Applications must be received no later than April 30, 1998.

1. Curriculum Vitae
2. List of publications and preprints
3. Brief statement of research interests and goals
4. Names and addresses of three referees familiar with the candidate's work (the candidate should arrange to have the letters of recommendation sent directly to the address above).

Princeton University is an Affirmative Action/Equal Opportunity Employer and particularly welcomes applications from women and members of minority groups.



DIRECTOR DIVISION OF ALLERGY, IMMUNOLOGY, AND TRANSPLANTATION

The National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH) is recruiting for the position of Director, Division of Allergy, Immunology, and Transplantation (DAIT). Annual salary range from \$77,798 – \$125,900. (M.D.'s may be eligible for other special pays). This individual provides scientific and administrative management to a staff of 20 employees and manages an annual budget of \$197 million. Responsibilities include planning and directing a program of research grants and contracts in immunology, allergic and immunological diseases. Applicants must hold either an M.D. or Ph.D. degree with research management experience with biomedical research programs funded through grants and/or contracts, where the scientific emphasis is on both laboratory and clinical aspects of immunologic and allergic diseases. Persons interested in this position may call **Dr. John La Montagne** at (301) 496-9677. For more information on the application process, please contact **Ms. Lynn C. Hellinger** (see below). Applications should be submitted and postmarked no later than June 5, 1998, to:

Ms. Lynn Hellinger
Director, Office of Human Resources Management, NIAID
Building 31/Room 7A20
31 Center Drive MSC-2520
Bethesda, MD 20892-2520
Phone: 301-496-9686

NIH is an Equal Opportunity Employer.

MYRIAD GENETICS, INC.

EMPLOYMENT OPPORTUNITIES

Salt Lake City, UT

Myriad Genetics, Inc. is a leader in the discovery of important disease genes and in the development of genetic tests for predisposition to cancer, cardiovascular disease and other major diseases. To learn more, please visit our web site at:

www.myriad.com

Our Genetic Testing Laboratory has an immediate opening for a:

SENIOR PROGRAMMER

We are looking for a high-level applicant to join our Informatics team. The group currently consists of seven people who work with computer support, databases, software development, robotics, and data analysis in the support of a diagnostic genetic testing laboratory.

This position will provide challenging opportunities to develop applications which speed the process through which our laboratory genotypes and sequences test samples. Supporting a state-of-the-art lab, the Informatics department strives to maintain the highest degree of accuracy, quality control and sample tracking with a minimum of human intervention. You will be responsible for interacting with the scientists in the lab to identify software requirements as new tests are developed and analytical technologies change.

Working with a wide variety of people within the company, you must have excellent communication and user-needs analysis skills. Successful candidates must have a MS degree or higher in molecular biology, computer science or combined related experience and a strong desire to develop and support diagnostic automated laboratory process software.

Computer application and GUI development skills in C, C++ and Java on UNIX and MS NT is required, as well as experience in Sybase, JDBC, or ODBC. Experience in software tools used in the fields of genotyping and genetic sequencing is preferred and a background in UNIX system administration is a definite plus.

We offer an attractive compensation package and a stimulating interactive research and genetic testing environment. Please mail or fax a cover letter indicating the position of interest, a complete resume, and the names of three professional references, to: Human Resources Department, Myriad Genetics, Inc., 320 Wakara Way, Salt Lake City, UT 84108; Fax: 801-584-3640. EOE.



MYRIAD

Sequencing Director/ Production Sequencing Facility Manager

The DOE Joint Genome Institute is a merger of the DOE Genome Centers at Los Alamos National Laboratory (Los Alamos, NM), Ernest O. Lawrence National Laboratory (Berkeley, CA), and Lawrence Livermore National Laboratory (Livermore, CA). The JGI's initial focus is on large scale genomic sequencing, although a longer term goal is to couple such sequencing to an aggressive program in functional and comparative genomics. To support these efforts, a 57Ksq.ft. production sequencing laboratory is being constructed in Walnut Creek, CA, with occupancy anticipated in the Summer of 1998. Staffing of this facility is expected to be approximately 100 initially. Sequencing production levels over 100 million high quality finished bases per year are targeted.

In connection with its genomic sequencing effort, the Joint Genome Institute is seeking to fill two senior positions. The more senior of these is that of "Sequencing Director". This position would report to the Director of the Joint Genome Institute (Dr. Elbert Branscomb), and would have technical and operational responsibility for all of the JGI's genomic sequencing and sequencing support operations. The second position is that of Production Facility Manager - a position which would report to the Sequencing Director and have operational responsibility for the production facility in Walnut Creek.

Sequencing Director

Candidates for this position should have recognized stature as a senior level scientist in genomics-based research and have extensive experience in the management of large scale research and research/production operations. Extensive experience with sequencing technology and in large scale genomic sequencing is also essential. The applicant should have a strong interest both in the biological applications of human genomics and in the operational and technical challenges inherent in large scale production sequencing. He or she should also have strong, proven management skills and be able to provide technical and scientific leadership at the interface between industrial-scale resource production operations and the applications of these resources to fundamental biological problems.

Production Sequencing Facility Manager

Candidates for this position should have extensive experience and a proven track record in managing production sequencing efforts and in mastering the managerial and technical support issues involved in such efforts. This person will be located in the Walnut Creek facility and oversee both the business and scientific operations of the production sequencing facility.

Send resumes to Sarah Wenning, JGI Program Administrator, DOE Joint Genome Institute, Dept. AJSC4A8BS, L452, 7000 East Avenue, Livermore, CA 94550. These positions will be functionally attached to the JGI, but the candidate will formally have an appointment at one (or conceivably more) of the three participating laboratories. Equal Opportunity Employer.



Working on the molecular
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DRUG DISCOVERY RESEARCH AT SCHERING-PLOUGH

At Schering-Plough Research Institute in Kenilworth, NJ, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an advanced multidisciplinary research group.

SENIOR SCIENTIST Immunology

We seek a talented, highly motivated Scientist to join our research team in pursuit of novel, targeted therapies for transplantation and autoimmune disease. This is an outstanding opportunity to be a part of a state-of-the-art research department, involving applications of Cell Biology, Biochemistry and Molecular Biology to discovering novel therapeutics targeting chemokine-mediated pathways. Particular emphasis has been placed on applying genomics technology to our discovery efforts.

The successful candidate will provide Cellular and Molecular Immunology expertise to our therapeutic discovery projects, and will have a strong desire to play a key role as part of a team-oriented research program. To qualify, you will need a PhD and 1-3 years of postdoctoral experience with a background in the characterization of chemokines and their receptors, particularly their role in transplantation, autoimmune disease or cancer. Demonstrated skills in chemokine or G-protein coupled receptor research such as measurements of Calcium flux and chemotaxis, plus characterization of ligand-receptor interactions are required. Experience in molecular biology and biochemistry techniques, including plasmid construction, DNA sequencing, expression of recombinant proteins, receptor binding and ELISA assays is highly desirable.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing Dept. DD-DMS-PZ, to: Schering-Plough Research Institute, MS #1250, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



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**THE
J. DAVID GLADSTONE
INSTITUTES**
University of California,
San Francisco

POSTDOCTORAL FELLOWSHIP— DR. ERIC VERDIN

Position available for a Ph.D., M.D., or M.D./Ph.D. to study the mechanism of HIV-induced immune dysfunction. Current projects are focused on the role of Tat in T-Cell activation (*Science* 1997; 275:1481-5) and HIV-induced cell death (*J.Virology* 1998; 72:660). Experience in immunology and/or molecular biology preferred but all strong candidates will be considered.

Send CV and references to: Job #V98-007; Gladstone Institutes, P.O. Box 419100, San Francisco, CA 94141; or fax to (415) 431-4039. Email: hr@gladstone.ucsf.edu Web: <http://gladstone.ucsf.edu>

**Equal Opportunity/Affirmative
Action Employer**

American College of Rheumatology Antigen Presentation: Basic Biology and Applications to Autoimmune Disease

This ACR Basic Research Conference will be held on November 7-8, 1998, at the San Diego Marriott Hotel and Marina in San Diego, California. Conference sessions include:

Antigen Processing and Presentation
Peter Cresswell, Yale University
Antonio Lanzavecchia, Basel Institute
Peter Jensen, Emory University

**Structural Biology Of Antigen Presentation And
T Cell Recognition**
Don Wiley, Harvard University
Roy Mariuzza, Center for Advanced Research in Biology

**CD1 Based Antigen Presentation And Recognition
By The $\gamma\delta$ TCR**
Michael Brenner, Harvard Medical School
Joseph Craft, Yale Medical School

Antigen Recognition Models Of Autoimmunity I
Gerald Nepom, Virginia Mason
Francesco Sinigaglia, Roche Milano Ricerche
Grete Sonderstrup, Stanford University

Antigen Recognition Models Of Autoimmunity II
Hugh McDevitt, Stanford University
John Kappler, National Jewish Medical and Research Center
Diane Mathis, IGBMC

This conference will immediately precede the ACR National Meeting in San Diego. For more information about the ACR Basic Research Conference or to receive a call for abstracts or registration information, please call the ACR office at (404) 633-3777.

**DEPUTY DIRECTOR
FOR RESEARCH
National Center for Toxicological
Research (NCTR)
DHHS/Food and Drug
Administration (FDA)
Jefferson, Arkansas**

NCTR, located 35 miles south of Little Rock, Arkansas, is a research center of the FDA, DHHS. The mission of NCTR is to conduct peer-reviewed scientific research that supports and anticipates FDA's current and future regulatory needs.

This involves fundamental and applied research specifically designed to define biological mechanisms of action underlying the toxicity of products regulated by the FDA. This research is aimed at understanding critical biological events in the expression of toxicity and developing methods to improve assessment of human exposure, susceptibility, and risk.

NCTR conducts collaborative research with other parts of the FDA, other government agencies, academia, and industry. These interactions enhance opportunities to provide more effective and realistic measures of health-related risks associated with FDA-regulated products.

The Deputy Director for Research is a senior management official responsible for directing all of the scientific programs of NCTR and contributing fully in all aspects of Center management. The Deputy Director formulates overall science direction for the Center's research programs and cultivates and manages the human, physical, and fiscal resources to accomplish research objectives. The NCTR research staff includes approximately 90 doctoral investigators and 60 support personnel. On-site animal care and pathology are conducted with 150 contract employees.

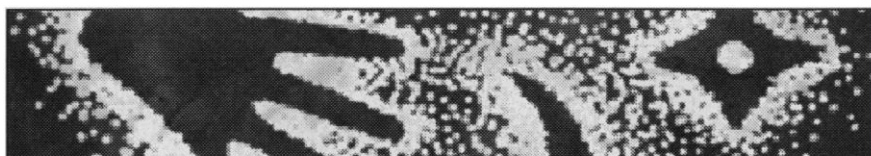
NCTR is a multicultural, multinational work environment. As director of research, the incumbent is responsible for maintaining and promoting an atmosphere of mutual acceptance and cooperation among a diverse work group.

This is an excepted civil service managerial position in the Senior Biomedical Research Service with a starting salary range of \$125,000 to \$135,000. This position requires a doctoral-level degree in biomedicine or a related field including behavioral science and epidemiology/biostatistics. Individuals must be actively engaged in peer-reviewed original biomedical research and considered by their peers to be outstanding. A strong scientific background in toxicology/biology and managerial experience in a scientific environment is desired. Relocation expenses will be paid in accordance with FDA policy.

To express your interest in this position, please call **Mary Ann Hutchison (870-543-7505)** for a complete copy of the vacancy announcement or write to:

**FDA/NCTR Personnel Office
Attn: Mary Ann Hutchison
3900 NCTR Road
Jefferson, AR 72079-9502**

Applications must be postmarked no later than May 31, 1998. *FDA is an Equal Opportunity Employer.* FDA/NCTR is a smoke-free environment.



MOLECULAR TOXICOLOGIST


Pharmacia & Upjohn is among the world's largest pharmaceutical companies. We are involved in areas such as Oncology, Infectious, Metabolic, and Central Nervous System diseases to help people live longer and fuller lives. A position is available for a mechanism-oriented Ph.D. research scientist/toxicologist in Worldwide Toxicology at our research facility in Kalamazoo, Michigan. This scientist will play a pivotal role in investigating the mechanism of toxicology of new drug candidates as a member of a multidisciplinary team.

The selected candidate will be responsible for planning, designing, conducting, and interpreting toxicology studies intended to provide mechanistic information about toxicology of new pharmaceutical entities as well as established drugs. Experience with investigation of mechanisms of toxicology of pharmaceutical agents is a strong positive factor. The candidate will work with Drug Discovery teams to investigate and implement new methodologies for predicting toxicity of novel pharmaceutical entities. This position requires demonstrated knowledge and experience with the methods of cell biology and molecular toxicology.

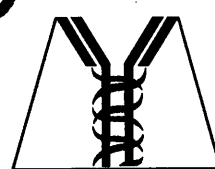
The successful candidate will need to create new in vivo and in vitro assays for toxicity evaluation based on limited data and implement the assays in a team-oriented environment.

Strong communication and teamwork skills are essential and the candidate will be expected to publish internally and externally in high-quality, peer-reviewed journals. An appreciation of the whole animal and its complexities will be expected as will the ability to interpret results in the context of clinical risk/benefit assessments. The successful candidate will have a strong fundamental education in bioscience with a Ph.D. in Toxicology, Biology, Cell Biology, or Biochemistry and more than 3 years experience related to the mechanisms of toxicity.

We provide career opportunities for individuals who want to make a difference in their jobs and for the millions of people who rely on our products worldwide. If you're one of them, contact us. Competitive salary and benefits packages available. For confidential consideration please send your C.V. to: **Pharmacia & Upjohn, Ad #980145, Recruiting, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001.** Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com. We are an equal opportunity employer with a commitment to workplace diversity.



Pharmacia & Upjohn



PHARMINGEN
A Becton Dickinson Company

PharMingen, a rapidly growing biotech company engaged in the development, manufacture & marketing of quality biomedical research products, has several challenging positions available. PharMingen offers a competitive compensation & benefits package, including a matching 401(k) plan & a stimulating work environment. Please send resume & salary requirements indicating the position of interest by referencing the job number to: Human Resources, PharMingen, 10975 Torreyana Road, San Diego, CA 92121 or fax to (619) 812-8888. Resumes without salary requirements may not be considered. EOE

TECHNICAL APPLICATION SPECIALISTS

Min 4-5 yrs hands-on lab exp in biomedical science. Exp w/flow cytometry, ELISA, immunology or molecular bio techniques pref. Previous marketing & sales background desirable. Resp incl coordinating sales efforts w/sales staff, educating, training & providing technical field applications support; troubleshooting & resolving technical issues; developing sales support materials & programs. Req approx 50%-70% travel. Excellent oral & written communication, organization, planning & troubleshooting skills. B.S. in biology/related science required.

#310-Western Region-Ideal base location: Bay Area or So Cal/San Diego.
#329-Eastern Region-Ideal base location: Washington, DC
#330-Central Region-Ideal base location: Chicago, IL

SCIENTIST, CLINICAL RESEARCH (#318)

Ph.D w/3 years strong exp in immunology & immunoassay development, including 2 years flow cytometry exp required. Responsibilities include functional evaluations & develop QC methods for human mAbs. Must have strong communication/interaction skills. Ph.D. in biology/related science required.

Please visit our website @ www.pharmingen.com



St. Jude Children's Research Hospital

ALSAC • Danny Thomas, Founder

Postdoctoral Position Biochemistry and Molecular Biology

A postdoctoral position is available in the laboratory of Dr. Charles Rock to investigate the role of specific enzymes in phospholipid metabolism in cell physiology and growth factor signaling. The recent cloning of several key enzymes in mammalian phospholipid synthesis and turnover in our group has opened the door to the detailed biochemical analysis of their regulatory properties coupled with the elucidation of the critical cellular functions of specific isoforms by generating transgenic and knockout mice. This program is best suited to recent Ph.D.s with a strong background in cell and molecular biology interested in applying contemporary techniques in biochemistry and genetics to the understanding of complex metabolic networks. Individuals should send a curriculum vitae, a brief statement of research interests and the names of three persons that can be contacted for letters of recommendation to:

Dr. Charles O. Rock
Biochemistry Department
St. Jude Children's Research Hospital
332 N. Lauderdale
Memphis, TN 38105-2794
E-mail: charles.rock@stjude.org
Web site: www.stjude.org

Equal Opportunity/Affirmative Action Employer



OUR PROFESSIONALS ADD VALUE

Enterprise Advisory
Services, Inc. (EASI)
has the following
opportunity available:

NUTRITIONAL BIOCHEMISTRY TECHNICIAN

Applicants should possess a Masters degree in Nutrition or Biochemistry with biochemical laboratory experience in a basic human research environment. In addition to hands on experience with human nutritional biochemistry, the successful candidate should have a comprehensive background in sample processing protocols, methods development and validation, implementation of novel techniques, and instrument troubleshooting and routine maintenance procedures. Data processing, data reduction, statistical analysis, and graphical presentation of analyzed data are components of this position. Excellent oral communication and technical writing skills are required. Previous experience with high performance liquid chromatography, enzyme linked immunosorbent assays, stable isotope measurements, radioimmunoassays, and/or spectrophotometry is highly desirable. Knowledge of requirements for standard laboratory safety and biohazardous materials handling is essential. The research conducted at the NASA Johnson Space Center includes definition of nutritional requirements for spaceflight, evaluation of protein, calcium, energy, and iron utilization as a function of spaceflight.

Interested applicants should submit current resume, a list of references, and salary history to: Enterprise Advisory Services, Inc., Human Resources Department, 16903 Buccaneer, Suite 250, Houston, Texas 77258-2508 Fax: 281-486-8454; e-mail: rblacknell@easiwww.com. Employment Eligibility Verification Required. EOE M/F/H/V. Smoke-free workplace.



Dalhousie University Department of Biomedical Engineering

ASSISTANT PROFESSOR - Tissue Engineering
ASSISTANT PROFESSOR - Drug Delivery Systems
ASSISTANT PROFESSOR - Rehabilitation Engineering

Applications are invited for three new full-time tenure-track positions at the rank of Assistant Professor in Dalhousie University's new Department of Biomedical Engineering. These positions are being created as part of a new graduate degree programme in Biomedical Engineering with the assistance of a Whitaker Foundation Special Opportunities award. Starting date is September 1, 1998.

The ideal candidates will have an undergraduate engineering degree from an accredited program, a Ph.D., and preferably post-doctoral academic or industrial experience. They should also be eligible for registration as professional engineers in the province of Nova Scotia.

Successful candidates will be expected to contribute to the graduate and undergraduate teaching programs of the department. While startup funding is available, successful candidates will be expected to compete for external research funding.

Applicants should submit: (i) a curriculum vitae, (ii) two to three reprints of recent publications, (iii) a one to two page statement outlining their research plans, and (iv) the names, addresses and internet addresses for three references to:

Dr. J. Michael Lee
Interim Director, Biomedical Engineering
Dalhousie University
5981 University Avenue
Halifax, Nova Scotia
Canada B3H 3J5

Closing date for receipt of applications will be May 31, 1998. Dalhousie University is an Employment Equity/Affirmative Action employer. The University encourages applications from qualified Aboriginal peoples, persons with a disability, racially visible people, and women. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.

Calgene, a wholly owned subsidiary of Monsanto Company, is a leading agricultural biotechnology company focusing on the research and development of genetically engineered plant products for the nutrition and agricultural markets. Our continued success requires the skills of an experienced Bioinformaticist.

BIOINFORMATICIST

Your primary responsibility entails supporting a Sun Enterprise server and associated software, including GCG; proprietary plasmid and sample tracking software; and web-based interfaces to a variety of databases and molecular biology packages. In addition, you will write or modify existing software in support of research projects and train research scientists, assisting them with data analysis. Requires an advanced degree in the sciences (Bioinformatics or Computer Science preferred; Molecular Cell Biology, Physiology, Genetics, or Biochemistry with a solid computer background also considered). Necessary computer skills include knowledge of UNIX, SQL, Perl, C++, web development, and Microsoft Office. MS Visual Basic and Oracle skills are a definite plus. Successful candidates have a strong background in DNA and protein sequence analyses, as well as excellent communication and presentation skills.

Calgene is proud to offer competitive wages and a comprehensive benefits package. For immediate consideration, mail or fax your resume and references to Calgene, Inc., 1920 Fifth St., Davis, CA 95616, Attn: Human Resources. Fax (530) 792-2453. EOE M/F/D/V.



CALGENE

FACULTY POSITION IN NEUROSCIENCE

National Institute of Environmental
Health Sciences
National Institutes of Health

A tenure-track neuroscientist is being recruited to conduct independent research within the Intramural Program at the National Institute of Environmental Health Sciences (<http://www.niehs.nih.gov>) in Research Triangle Park, North Carolina. Postdoctoral scientists with outstanding research programs in any area of neuroscience will be considered, but there is particular interest in neural development, genetics of neurodegenerative diseases, model systems for neurological disorders, and neurotoxicity. Excellent facilities and research support are available with a competitive salary and start-up package.

Applicants should submit a curriculum vitae and research summaries of past accomplishments and future plans, and request three letters of reference. Applications from women and minority groups are encouraged. Please send completed applications by May 22, 1998 to: **Ms. Dara Trupe, Human Resource Management Branch (HNV98-8), National Institute of Environmental Health Sciences, P O Box 12233, Maildrop EC-11, Research Triangle Park, NC 27709; tel: 919-541-7513 / e-mail: trupe@niehs.nih.gov**

NIEHS/NIH is an Equal Opportunity Employer.

POSTDOC/SENIOR SCIENTIST POSITIONS

Four positions are available in the Laboratory of Genetics at the National Institute on Aging (NIA), Baltimore, Maryland.

Two postdoc positions are in **Dr. Weidong Wang's** group. We have cloned all subunits within a human SWI/SNF complex involved in chromatin remodeling during development and differentiation. Projects include purification of novel tissue-specific chromatin remodeling complexes and cloning of their subunits. One postdoctoral or senior scientist position is in **Dr. Minoru S.H. Ko's** group, based on their collections of more than 40,000 ESTs from pre- and peri-implantation embryos. The proposed studies will examine the mechanism of stem cell immortalization by analyzing the differentiation of mouse embryo cells into inner cell mass and trophectoderm.

One position is in **Dr. David Schlessinger's** group, based on their recovery of the gene responsible for X-linked ectodermal dysplasia (EDA). The goal is to analyze the regulation of genes involved in hair and sweat gland formation, with accompanying embryological studies in the Ta mouse model.

Applicants must have a Ph.D. or M.D. and less than 5 years of appropriate research experience for postdoc positions or 6 years or more for the senior scientist position. Send c.v. and three letters of reference to **A. Michaelis, Laboratory of Genetics, GRC, Box 31, NIH, NIA, 5600 Nathan Shock Drive, Baltimore, MD 21224-6825, or E-mail to: michaelisa@grc.nia.nih.gov** by May 15, 1998.

SR. VALIDATION SPECIALIST/PROCESS

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- Research activities are expanding at our 43-acre Berkeley, CA-based Biotechnology Unit, which is responsible for the global research, development and production of biotechnology-derived products. Our research and development program includes activities in new therapeutic protein gene discovery, protein engineering and gene therapy. Additionally, our Pharmaceutical Division has worldwide responsibility for the research and development of treatments for cancer, diabetes, osteoporosis and obesity.
- This vital process of discovery and achievement begins now — and begins with you. In this challenging position, you will have the opportunity to be part of a team dedicated to making breakthroughs that will improve the lives of future generations.
- You will champion our process validation projects, which will involve directing the activities of contractors and teams, plus tracking schedules and projects from inception through to completion. Your expertise in protein purification, analytical methodology, experimental design, and effects of changing conditions on product integrity for therapeutics will be challenged throughout the entire scope of the project. You will also develop validation models, perform statistical analyses, and create supporting documentation and summaries for your evaluations.
- Requires a strong combination of education and experience, such as a BS in Biology, Chemistry, Biochemistry, Engineering or related discipline with 6+ years' related experience. We seek experts in protein purification, statistical analysis, and analytical methodology, with a successful background in designing/executing process validation studies in a pharmaceutical environment. Management expertise (particularly project management) will be critical. Strong interpersonal and communication skills in a matrixed environment are also essential.
- Bayer offers an attractive compensation package... and there's one more fact. If you're ready to join us, there's no better time than now. For immediate consideration, please forward your resume to: **SW100A, Human Resources, Bayer Corporation, Pharmaceutical Division, P.O. Box 1986, Berkeley, CA 94701.**
No agencies or phone calls please. For more information on Bayer, search: <http://www.careermosaic.com/cml/bayer/>

An Equal Opportunity Employer M/F/D/V. Bayer Corp. is committed to enhancing and maintaining cultural diversity within our work environment.



**Pharmaceutical
Division**

IMMUNOLOGY

Wyeth-Lederle Vaccines and Pediatrics (WLVP), a member of the Wyeth-Ayerst family, is recognized internationally as a leader in the research, development and manufacture of vaccines for prevention of viral and bacterial diseases. We currently have the following immediate opportunities at our Pearl River, NY location:

SENIOR RESEARCH ASSOCIATE

Successful candidate will independently plan and carry out properly controlled immunoassays such as ELISAs, proliferation and cytokine quantitation. Additional responsibilities include: animal handling for immunization and sample collection; basic virology techniques including virus propagation and plaque quantitation; computer-based data analysis; and operation of plate washers, plate readers, isotope counters and FACScan.

This position requires a Bachelor's Degree in Biology, Immunology, Microbiology or other related scientific discipline and 7 years (Master's, 5 years) related experience which includes working with tissue culture, isotopes and animal handling. Excellent written and verbal communication skills and proficient computer skills are required.

ASSOCIATE RESEARCH SCIENTIST

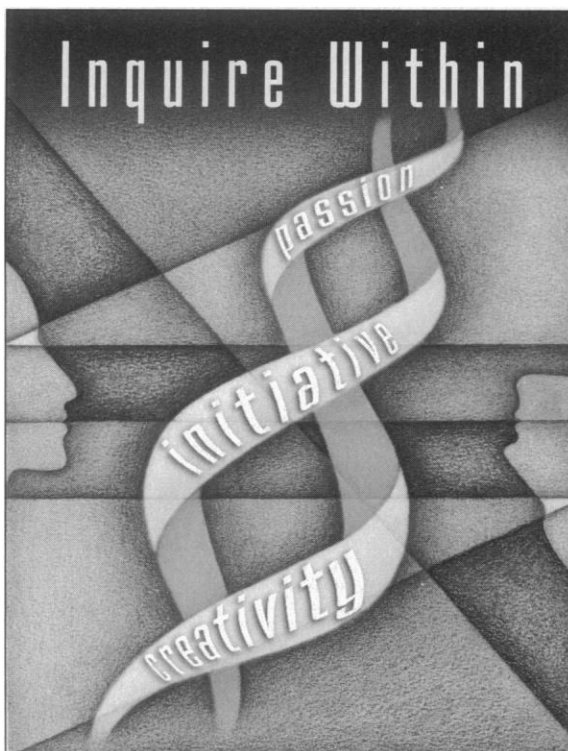
Successful candidate will provide technical assistance to Ph.D. Researcher in the Viral Vaccines Immunology Group to evaluate pre-clinical and clinical immune responses to vaccine candidates along with some support of pilot plant and development activities. You will also be responsible for immunization and collection of tissues/fluids from small animals to characterize immunological and virological events associated with vaccine candidates.

This position requires a Bachelor's Degree in Biology, Immunology or Microbiology and 10 years (Master's, 8 years) related experience. Must also possess animal handling skills, including dosing and dissection, basic tissue culture techniques, immunoassay design and application for both cell-mediated and humoral immune responses. Knowledge of basic techniques in virology to grow, purify and titer animal viruses is required. Additionally, you must be able to critically analyze data and experimental results and design rigorous controls; as well as operate a variety of instruments such as ELISA platereaders/washers, gamma counters and centrifuges.

We offer competitive compensation and benefits, including a Savings Plan. If you wish to be considered for one of these outstanding opportunities, please send your resume including salary history, and indicating position of interest, to: **Wyeth-Lederle Vaccines and Pediatrics, Human Resources, 401 No. Middletown Road- #140/402, Pearl River, New York 10965. Principals Only Please. An Equal Opportunity Employer.**



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Vaccines and Pediatrics**
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extraordinary science

Genentech's people share some pretty uncommon traits. Not surprising when you consider the scope of our mission – creating breakthrough medicines for conditions like cystic fibrosis, stroke, growth disorders, cancer and heart attacks. It demands a very special kind of person. Someone who will take risks, accept responsibility and constantly seek creative solutions.

Do you have the traits to contribute to making our vision of longer, healthier lives for thousands of people a reality? Consider what you expect from a career and from yourself. Expect the extraordinary? Then share your traits with us.

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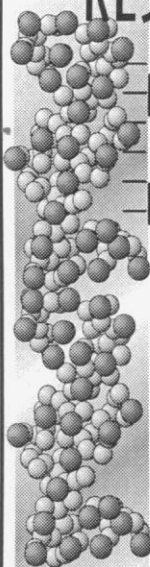
Scientist, Modeling and Computational Chemistry

We are seeking a talented peptide/protein modeler or computational chemist to work in a multidisciplinary team. Your focus will be on the discovery and optimization of new, small molecular inhibitors of protein-protein interactions as potential therapeutics.

Ideal Candidates should have a strong background in the use of computational methods to explore protein and peptide structure-function relationships, the structure-based design of peptides and peptidomimetics and the medicinal chemistry optimization of lead compounds. You must have a PhD in a relevant field and 2-10+ years' additional experience.

We offer progressive benefits. Send your resume, indicating Job Code SCIMOD, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Plain typefaces, no faxes. E-mail your resume to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. EOE

GENOMICS RESEARCH



Mystic, Connecticut

DEKALB Genetics Corporation, the fastest growing agricultural seed company in the U.S., has career opportunities for innovative scientists in Genomics R&D for the genetic improvement of corn.

BIOINFORMATICS - GR1

PH.D. in Molecular Biology or equivalent and a B.S. in Computer Science.

SYSTEM ANALYST - GR2

B.S. in Computer Science is required.

Both positions require strong relational database design, software development, and project management skills in an Oracle, JAVA, PERL, VB, UNIX, and NT technical environment.

These positions are available at DEKALB's biotechnology research facility in Mystic, CT. Mystic is a scenic shoreline community located on Long Island Sound, halfway between New York and Boston. For more information on DEKALB, visit our web site at <http://www.dekalb.com>. Please mail your resume and 3 professional references (indicating position and GR#) to:

DEKALB Genetics Corporation
Human Resources/GR#
62 Maritime Drive
Mystic, CT 06355-1958



EOE

National Institutes of Health

National Institute on Deafness and Other Communication Disorders
Bethesda, Maryland

DIRECTOR, DIVISION OF INTRAMURAL RESEARCH

Opening Date: 04-01-98

Closing Date: 05-15-98

(All applications must be post-marked by the closing date.)

The National Institute on Deafness and Other Communication Disorders (NIDCD) is recruiting for the position of Director, Division of Intramural Research (DIR). The Director, DIR, directs a program of multi-disciplinary fundamental and clinical research for the NIDCD. The Director, DIR, serves as the principal advisor to the Institute Director on biomedical and scientific affairs involving the intramural research programs conducted by basic and clinical research investigators in the field of deafness and other communication disorders. In addition, he/she will plan and conduct an independent research program related to deafness and other communication disorders.

Candidates for this position must have a M.D. or Ph.D., with extensive professional research experience in one or more of the areas of research that has or will contribute new knowledge in the biomedical and behavioral issues recognized as part of the NIDCD mandate.

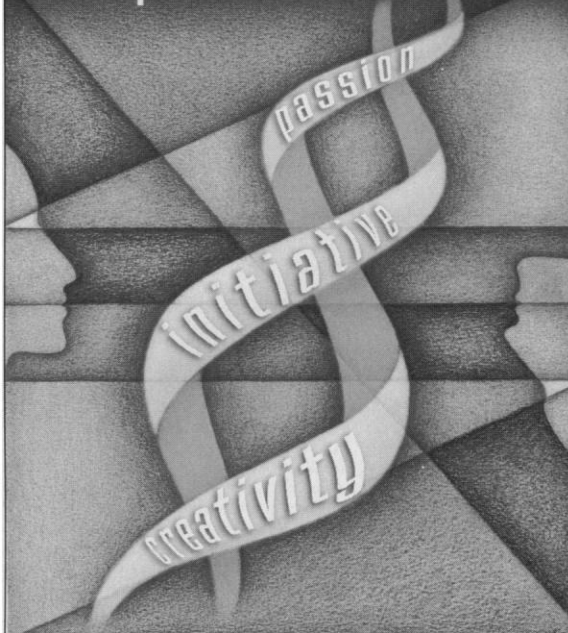
Salary may range from \$77,798 to \$151,800 per year and additional compensation may be authorized depending on individual's qualifications.

Further information about the position and qualification requirements may be obtained from <http://www.nih.gov/nidcd> or by contacting Ms. Christine Clements at (301) 402-0508 (Voice or TTY) or TTY (301) 402-1134. Applicants are required to submit a Bibliography and either a Curriculum Vitae, Application for Federal Employment (SF 171), Optional Application for Federal Employment (OF-612), Resume or any other written format to: **Ms. Christine A. Clements, Personnel Management Specialist, NIDCD, National Institutes of Health, 31 Center Drive MSC 2320, Bethesda, Maryland 20892-2320 E-mail: ClementsC@ms.nidcd.nih.gov**

Additional information may be obtained from: **Dr. Story C. Landis, Chairperson, NIDCD Search Committee for Director, Division of Intramural Research, NIDCD (301) 435-2232 E-mail: SL122c@nih.gov**

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Do you have the traits to contribute to making our vision of longer, healthier lives for thousands of people a reality? Consider what you expect from a career and from yourself. Expect the extraordinary? Then share your traits with us.

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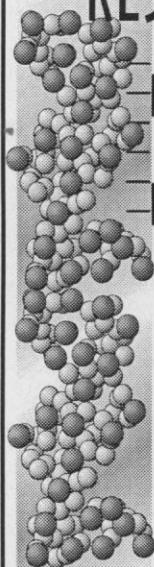
Scientist, Modeling and Computational Chemistry

We are seeking a talented peptide/protein modeler or computational chemist to work in a multidisciplinary team. Your focus will be on the discovery and optimization of new, small molecular inhibitors of protein-protein interactions as potential therapeutics.

Ideal Candidates should have a strong background in the use of computational methods to explore protein and peptide structure-function relationships, the structure-based design of peptides and peptidomimetics and the medicinal chemistry optimization of lead compounds. You must have a PhD in a relevant field and 2-10+ years' additional experience.

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GENOMICS RESEARCH



Mystic, Connecticut

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SYSTEM ANALYST - GR2

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DEKALB Genetics Corporation
Human Resources/GR#
62 Maritime Drive
Mystic, CT 06355-1958



EOE

National Institutes of Health
National Institute on Deafness and Other Communication Disorders
Bethesda, Maryland

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Opening Date: 04-01-98

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Candidates for this position must have a M.D. or Ph.D., with extensive professional research experience in one or more of the areas of research that has or will contribute new knowledge in the biomedical and behavioral issues recognized as part of the NIDCD mandate.

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Additional information may be obtained from: Dr. Story C. Landis, Chairperson, NIDCD Search Committee for Director, Division of Intramural Research, NIDCD (301) 435-2232 E-mail: SI122c@nih.gov

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POSITIONS OPEN

PETROLEUM GEOSTATISTICIAN STANFORD UNIVERSITY

The Department of Petroleum Engineering of Stanford University invites applications for a position in the tenure-track professoriate at the **ASSISTANT PROFESSOR** level starting in 1998. Although there is considerable flexibility in the starting date, the candidate should be available no later than March 1999.

We seek a scholar with broad interdisciplinary research activities in the area of petroleum geostatistics, geology, and reservoir characterization. The candidate will have strong numerical skills including geostatistical data analysis and stochastic modeling of geological heterogeneities. (S)he will also have expertise in fluid flow modeling and simulation. Applicants must have a Ph.D. degree. While the primary focus of this search is to find an outstanding candidate at the Assistant Professor level, exceptional **ASSOCIATE PROFESSOR**-level candidates will also be considered.

Send curriculum vitae, names and addresses (with e-mail) of three references, a statement of teaching and research interests, and no more than three reprints from refereed journals by August 15, 1998, to:

Professor Khalid Aziz
Chair, Search Committee
Department of Petroleum Engineering
Stanford University
Stanford, CA 94305-2220 USA

Further information about the Petroleum Engineering Department is available at website: <http://ekofisk.stanford.edu/>.

Stanford University has a strong commitment to the principle of diversity. In that spirit, we particularly encourage applications from women, members of ethnic minorities, and individuals with disability.

ASSISTANT PROFESSOR in wetlands wildlife ecology. The Department of Wildlife Ecology and Conservation invites applications for a 12-month, tenure-track, teaching (70 percent) and research (30 percent) position. Teaching responsibilities include undergraduate courses in wetland wildlife resources, conservation biology, a graduate course in area of expertise, and supervision of M.S. and Ph.D. students. Research responsibilities include developing a competitive program in the ecology of wetland systems in Florida, with a primary emphasis on wetland wildlife and, secondarily, wetland protection and restoration. Applicants must have a completed doctorate degree in wildlife ecology, conservation biology, or a closely related field. Applicants must demonstrate excellence in written and oral communication skills, a strong commitment to teaching, and the ability to procure extramural funding. Salary commensurate with qualifications and experience.

Applications will be accepted until June 1, 1998. Please send a letter of application, a curriculum vitae, official transcripts of academic work, and the names, e-mail addresses, and telephone numbers of five references. Reference position #925320. Individuals wishing to nominate candidates should contact the Search Committee Chair by May 1, 1998. Please send all nominations, applications, and inquiries to: **Dr. Mel Sunquist, Search and Screen Committee Chair, Department of Wildlife Ecology and Conservation, P.O. Box 110430, University of Florida, Gainesville, FL 32611-0430. Telephone: 352-392-4851; FAX: 352-392-6984; e-mail: mesu@gnv.ifas.ufl.edu.** *The University of Florida is an Equal Opportunity/Equal Access/Affirmative Action Employer. Women and minorities are encouraged to apply.*

In order to fulfill the requirement of promoting minority scientific faculty, we are seeking applicants to compete with internal candidates for a tenured position at the **ASSOCIATE PROFESSOR** level. Applicants who have the following qualifications are welcome: *U.S. citizen* with a doctoral degree in genetics with at least four years of postdoctoral research training. In addition, the candidate should have a history of supports by national agencies (NIH, NSF, and AHA). The candidate should have independent projects with external funding in the areas of (1) mechanism of DNA damage and repair in the brain after stroke, (2) the regulation of immediate early genes using antisense oligodeoxynucleotides in the brain after cerebral ischemia reperfusion injury, and (3) rescue of drug-sensitive cell by the drug-resistant gene, or by antisense DNA transfer. Qualified candidates should send curriculum vitae to: **Robert G. Grossman, M.D., Professor and Chairman, Department of Neurosurgery, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.** *Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.*

POSITIONS OPEN

Two tenure-track faculty positions at the rank of **ASSISTANT PROFESSOR** are available immediately in the Program of Molecular Immunology at the Institute of Molecular Medicine and Genetics (IMMAG), Medical College of Georgia. The Program consists of five faculty with various interests in the immunobiology field. Faculty interests include autoimmunity and tolerance mechanisms, macrophage mediated immunoregulation, T cell repertoire selection, and the role of T and B cells in infectious disease. It is intended that the two additional faculty appointments will broaden and complement these research interests. The Institute is located in a new custom-built Interdisciplinary Research Center. The Institute is a well-funded research community of 36 faculty divided into four program areas: gene regulation, cell signaling, developmental biology, and molecular immunology. Core facilities for molecular biology, advanced imaging techniques, transgenic and knockout mouse production, histology, flow cytometry, and mouse pathology are available to all IMMAG Investigators. We seek qualified individuals to develop an active research program at IMMAG. Preference will be given to applicants with interests in the following research areas: antigen processing and presentation, T cell activation, lymphoid/myeloid cell interactions, molecular genetics of gene regulation, tumor immunology, and mammalian reproduction. A generous start-up package is available for successful applicants.

Apply or send résumé to: **Andrew Mellor, Ph.D., Medical College of Georgia, Institute of Molecular Medicine and Genetics, Program in Molecular Immunology, Augusta, GA 30912-2600. Telephone: 706-721-8735; FAX: 706-721-8732; e-mail: mellor@immag.mcg.edu.**

MCG is an Equal Opportunity Employer. Women, minorities, and the disabled are encouraged to apply.

CLINICAL CHEMISTRY FACULTY POSITION

ASSISTANT/ASSOCIATE PROFESSOR. The Department of Pathology and Laboratory Medicine at the University of California, Los Angeles, invites applications for a tenure-track faculty position at the level of Assistant/Associate Professor. The Division of Laboratory Medicine is seeking an individual with primary interest in chemical pathology (endocrinology, general chemistry, or toxicology). The candidate should have an M.D. or Ph.D. and should be Board-certified in clinical pathology or have equivalent clinical pathology experience. The candidate will be expected to carry out an independent research program and preference will be given to individuals with proven capacity to attract extramural funding. There will be active participation in the scientific, clinical, and teaching responsibilities of the clinical chemistry section.

Qualified candidates should send curriculum vitae, statement of research interest, and a list of three references to: **David A. Bruckner, Sc.D., Search Committee Chair, Department of Pathology and Laboratory Medicine, UCLA Medical Center 171315, 10833 LeConte Avenue, Los Angeles, CA 90095-1713.**

University of California is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

UNIVERSITY OF SOUTHERN CALIFORNIA ANDRUS GERONTOLOGY CENTER

The Center is seeking faculty for academic leadership in the following area:

Biology-related. Tenure-track position in the biology of aging and biomedical areas. The candidate should hold a Ph.D. in neurobiology, molecular biology, or a related field.

Appointment could be at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. All candidates are expected to have a strong independent research program. Opportunities are available for joint appointments with other Ph.D.-granting units.

Persons interested in the position should send a curriculum vitae, along with a letter indicating experience, areas of interest, and names and addresses of three references to:

Dr. Caleb Finch, Chairperson
Search Committee
Andrus Gerontology Center
University of Southern California
Los Angeles, CA 90089-0191

The University of Southern California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR CELL SIGNALING UNIVERSITY OF NORTH CAROLINA

The Department of Pharmacology is seeking to recruit an outstanding scientist to fill a tenure-track position at either the Assistant or Associate Professor level in the area of signaling at the cellular or molecular level; preference will be given to applicants studying signaling in the nervous system. Applicants interested in the Assistant Professor position should be recognized as an emerging leader in their field of research. Research in signaling at the cellular and molecular level is a major strength of our department and the local research community (for a description, see our website: <http://www.med.unc.edu/pharm/faculty.htm>). The successful candidate will receive an excellent start-up package and have access to graduate students supported by a NIH-supported departmental graduate program and from several interdepartmental graduate-training curricula. Applicants should send curriculum vitae, a letter describing current research interests and future research plans, and the names and addresses of three references to: **Dr. Ken McCarthy, Search Committee Chair, Department of Pharmacology, CB# 7365, University of North Carolina, Chapel Hill, NC 27599-7365.** Alternatively, you may send this information via e-mail: phco_search@med.unc.edu. Review of the applications will begin in April 1998, and continue until an applicant is selected and recruited.

Our Department is committed to increasing representation of women and members of minority groups on our faculty and particularly encourages applications from such candidates. UNC-CH is an Equal Opportunity/Affirmative Action Employer.

The Department of Physiology, Faculty of Medicine, University of Manitoba invites applications for two full-time contingent faculty positions at the level of **ASSISTANT PROFESSOR** in the Institute of Cardiovascular Sciences. Applicants should have M.D. or Ph.D. degree in any of the medical sciences with two to three years of postdoctoral experience in molecular biology, gene expression, biochemistry, physiology, or pharmacology. The candidates are expected to establish independent research programs in the area of heart failure and/or ischemic heart disease, collaborate with other members of the Institute, and teach both undergraduate and graduate students. Salary will be commensurate with experience and qualifications; however, the current salary range for Assistant Professors at the University of Manitoba is \$40,868 to \$62,509. Please send your résumé and statement of research goals and arrange for three letters of reference by May 15, 1998, to: **Dr. N. S. Dhalla, Institute of Cardiovascular Sciences, St. Boniface General Hospital Research Centre, 351 Tache Avenue, Winnipeg, Manitoba R2H 2A6 Canada.** *The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, Aboriginal peoples, and persons with disability. In accordance with Canadian immigration, this advertisement is directed to Canadian citizens and permanent residents.*

MOLECULAR MAMMALIAN GENETICIST

Seeking an individual with experience in molecular genetics and in transgenic/knockout mice with an interest in applying this to the genetic analysis of mental retardation. The individual must have the proper training and experience to be able to develop an independent research program and successful research grant proposals. An M.D. and/or Ph.D., with evidence of significant scientific contributions and leadership, plus a record of sustained grant support is desirable. This is a full-time, funded Research Scientist position (Ref. #831) with a salary of \$70,000. Send curriculum vitae to: **Personnel, NYS Institute for Basic Research in Developmental Disabilities, 1050 Forest Hill Road, Staten Island, NY 10314.**

FACULTY POSITION. King College, Tennessee. Biology, Ph.D., fall 1998. Teaching responsibilities include cell biology, mammalian physiology, human anatomy and physiology, and comparative vertebrate anatomy and development. King College is a four-year Christian liberal arts college in the Presbyterian tradition. Send curriculum vitae and statement of teaching and research interests to: **Dr. William Wade, Acting Dean of the Faculty, King College, 1350 King College Road, Bristol, TN 37620-2699.** Open until position filled. *King College is an Equal Opportunity Employer.*



HEALTH CARE INITIATIVES FOR THE NEW MILLENNIUM

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Centocor, one of the world leaders in the healthcare technology industry, is winning praises from professional organizations and the public for its breakthrough products and technologies. If you've ever wanted to be affiliated with a company that's performing groundbreaking work in a burgeoning field, look into the following opportunities available at our suburban Philadelphia headquarters:

Senior Director of Immunology/Clinical Research

Leadership position responsible for wide-ranging scientific and administrative direction of Immunology clinical research. Specifically, this includes design of objectives, selection of investigative techniques, team leading/mentoring responsibilities, development of clinical relationships, and support of marketing and sales initiatives. Requirements include at least

10 years combined clinical/biomedical research experience in the university and pharmaceutical industry settings and MD with specialty board certification in internal medicine and subspecialty certification and/or Ph.D. in an Immunological field. **Code: CR-98-JC-02A.**

Clinical Research Manager

Key position responsible for a wide range of supervisory duties for Phase I, II and III clinical trials including investigator selection, study initiations and close-outs, site and in-house data monitoring and data cleanup. Along with an MS degree or equivalent experience in a scientific discipline, qualified candidates will possess a minimum of 6-8 years of pharmaceutical-based clinical research experience playing a significant role in the clinical portion of at least one major Phase III program. **Code: CA-97-JC-01R.**

Centocor offers compensation packages in accordance with its leadership role in healthcare technology including career development opportunities and a state of the art work environment. **To inquire, please submit resume indicating proper job code to: Human Resources Dept., Centocor, 200 Great Valley Parkway, Malvern, PA 19355. Fax 610-651-6330. EOE M/F.**



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JOIN US FOR THE FUTURE

Maine Medical Center is a 598-bed tertiary care and teaching institution with a multi-state referral base, located in Portland, Maine. This New England city has one of the country's most picturesque coastlines. It offers an exciting waterfront area, countless recreational activities and a wealth of cultural attractions. As the largest city in the state, Portland is exceptionally diverse and always exciting.




POSTDOCTORAL POSITIONS

Center for Molecular Medicine Maine Medical Center Research Institute

Several postdoctoral positions are available to participate in research programs focused on understanding novel secretion pathways for signal peptide-less proteins, signal transduction pathways regulated by growth factors, cytokines and cell fate determinants, molecular mechanisms of tissue/organ repair and the molecular genetics of human bone development and neoplasia. Applicants with experience in cell biology, biochemistry and molecular biology are encouraged to apply. Salary will be commensurate with experience.

Interested individuals should send a current curriculum vitae and three letters of reference to: **Dr. Volkhard Lindner, Search Committee Chair, Center for Molecular Medicine, Maine Medical Center Research Institute, 125 John Roberts Road, Suite #12, South Portland, ME 04106.** We are an equal opportunity employer strengthened by the diversity of our professional community.


Maine Medical Center
*The Trusted Choice
The MaineHealth Family
An Affirmative Action Employer.*

Microbiology Specialist

Lonza Inc., a multinational leader in the specialty chemical industry, has an immediate opening for a Microbiology Specialist at our Research Center located in Clinton, New Jersey.

We are seeking an individual with specialized knowledge and skill to increase the productivity and efficiency of traditional efficacy screening methods.

You will be responsible for the development, implementation and validation of high throughput methodology for screening new chemical entities for microbicidal activity. In this capacity you will identify, investigate and implement methods or method improvements which will support the synthesis of new antimicrobial compounds.

The successful candidate must have a Ph.D in Microbiology or related biological sciences with 5-7 years of related experience in efficacy screening of pharmaceutical agents, fungicides, bactericides, agricultural chemicals or industrial biocides using conventional and rapid screening testing methods. Experience with automation, robotics, and high throughput screening methods would be an advantage. Superb leadership and communication skills are required. Industrial experience is preferred.

Lonza Inc. offers a competitive starting salary along with a comprehensive benefits package. Please submit your resume with salary history to:

**Manager, Human Resources
LONZA Inc.**

**Corporate headquarters
17-17 Route 208, Fair Lawn, NJ 07410**

Local interviews will be conducted at our Research and Development facility.

LONZA

POSITIONS OPEN

GenVec, Inc., a privately held biotechnology company focused on the development and commercialization of gene transfer pharmaceuticals utilizing advanced, proprietary gene transfer systems and medically relevant genes, is looking for the following individuals:

ASSAY DEVELOPMENT SCIENTIST

Candidate must have a Ph.D. and a minimum of five years of experience in the development of analytical methods (chromatography), physicochemical characterization, and quality control for biotechnology-derived pharmaceuticals. Must have excellent written and oral communication and editing skills, be proficient with project management, and have aptitude to learn additional software programs. Must be able to work independently within a team structure.

ASSAY DEVELOPMENT ASSOCIATE

Candidate must have a B.S./M.S. degree and a minimum of three years of experience in the development of bioanalytical methods to support product development effort, including development of potency assays for biotechnology-derived pharmaceuticals. Experience developing host cell protein assays desirable. Must have excellent written and oral communication skills. Basic computer skills required. Individual must have the ability to work independently and within a team structure.

PROCESS DEVELOPMENT ASSOCIATE

Candidate must have a Bachelor's degree and a minimum of five years of experience in cell culture, purification, analytical methods development, or related fields. Experience in operation of cell culture equipment (stainless steel bioreactor suspension systems) with mammalian cells. Experience in analytical (HPLC) or immunoassay (ELISA) methods development desirable. Must have excellent written and oral communication skills. Basic computer skills required. Individual must have the ability to work independently and within a team structure.

GenVec, Inc.
Human Resources
Attention: MM
12111 Parklawn Drive
Rockville, MD 20852
FAX: 301-816-0085
E-mail: meyer@genvec.com

An Equal Opportunity Employer.

ASSOCIATE SCIENTIST

The University of Miami School of Medicine, Department of Microbiology and Immunology, invites applicants with Ph.D. or M.D. degrees and five years of postdoctoral experience to apply for a research position to study virally induced resistance to apoptosis in AIDS-related lymphomas and HIV infection. Candidates with a strong background in molecular biology and tumor immunology will be preferred. Expertise in analyzing death ligands/receptors and experience in working with HIV-infected cells (P3) is required. Position available November 1998. Send curriculum vitae, the names and addresses of three references to:

Dr. Eckhard R. Podack, Professor
Department of Microbiology and Immunology
University of Miami School of Medicine
P.O. Box 016960 (R-138)
Miami, FL 33101

The University of Miami is an Equal Opportunity/Affirmative Action Employer.

ORGANIC CHEMISTS

USV Limited
Molecular Medicine Research Laboratory

Applications are invited for Ph.D. scientists (eight years), research experience, especially with interests in nucleic acid chemistry/peptide chemistry and reaction mechanisms in synthesis of novel pharmaceutical compounds, for our recently established research laboratory. Successful applicants will integrate with our broadly based team of scientists for our molecular synthesis section.

Applicant should submit a curriculum vitae, a brief statement of research interests, copies of recent publications, and two references to: Dr. S. Mishra, Molecular Medicine Research Laboratory, USV Limited, B.S.D. Marg, Govandi Station Road, Govandi, Mumbai 400 088 India. Telephone: 91-22-5564048/49/50/51; FAX: 91-22-5515608/5584025.

USV Limited is a research-led institution and is an Affirmative Action/Equal Opportunity Employer. Complete applications should be received before June 20, 1998.

POSITIONS OPEN



SCIENTIST, POSTDOCTORAL, AND RESEARCH ASSOCIATE POSITIONS

Phase-1 Inc., a leader in the field of molecular toxicology, is accepting applications from talented, highly motivated people. Quantitative and analytical skills are required. Successful candidates will be experienced in RNA isolation, measurement of gene expression, and/or cell culture techniques. Located in Santa Fe, New Mexico, Phase-1 offers outstanding possibilities for career advancement. Send cover letter, curriculum vitae, and three letters of references to:

Phase-1 Molecular Toxicology, Inc.
1217 Parkway Drive
Santa Fe, NM 87505

ASSOCIATE DIRECTOR AND COORDINATOR OF GRADUATE PROGRAMS. The Center for Earthquake Research and Information (CERI), an earthquake science research institute within the College of Arts and Sciences at The University of Memphis, is seeking an Associate Director and Coordinator of Graduate Programs. The position will be tenure-track within the Department of Geological Sciences, Civil Engineering, or other appropriate home department. Applications from both junior and senior-level faculty are encouraged.

The Associate Director will oversee the daily operations of the center and will represent the center in the absence of the Director. Additional duties will be to coordinate teaching, advising, and recruitment in the M.S. and Ph.D. programs in geophysics, active tectonics, and earthquake engineering. Teaching and research within one of these disciplines are expected, although at appropriately reduced levels because of administrative duties. The successful candidate will interact frequently with the public, media, and other professional and academic groups and therefore should have strong verbal and written communication skills. The Ph.D. in one of the earth sciences or related fields is required. A demonstrated commitment to academic excellence is the most important selection criterion.

Salary and rank will be commensurate with the level of experience. Applicants should send a letter of application, a full curriculum vitae, and names of at least three references with their addresses (mail and e-mail) and telephone numbers. Applications should be sent to: Dr. Jose Pujol, Chair, Associate Director Search Committee, Center for Earthquake Research and Information, The University of Memphis, Memphis, TN 38152-6590. E-mail contact for inquiries: e-mail: pujol@ceri.memphis.edu. Applications screening will begin on June 1, 1998, but applications will be accepted until the position is filled. Additional information about CERI and the Associate Director position is available at website: <http://www.ceri.memphis.edu>. *The University of Memphis is an Equal Opportunity/Affirmative Action Employer.*

Dana-Farber Cancer Institute (DFCI) and the Department of Genetics, Harvard Medical School (HMS), seek candidates for the position of PROFESSOR of genetics (HMS) and member of the Charles A. Dana Division of Human Cancer Genetics (DFCI).

Candidates for this post must have a proven record of accomplishment in cancer genetics and/or related areas of science. Among the research areas of special interest to the search committee are genetics of proliferation, differentiation, cell death, chromosome structure, and/or genome stability control in lower and/or higher eukaryotes. The committee is also interested in candidates whose research focuses on the genetics of cancer development in humans, on complex genetics, including the regulation of penetrance of cancer-causing mutations, and on the development analysis of high fidelity animal models of human cancer. The Professor selected during this search will be expected to participate fully in the lives of both the Department of Genetics and the DFCI Division. Appropriate space and resources will be made available to the successful candidate.

Applicants should send curriculum vitae to: David M. Livingston, M.D., Chairman, Human Cancer Genetics Search Committee, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. Job Code: SE. *Dana-Farber Cancer Institute and Harvard Medical School are Equal Opportunity Employers, and each encourages the application of qualified women and minority candidates for this post.*

POSITIONS OPEN

ENVIRONMENTAL PHYSIOLOGIST UNIVERSITY OF ARIZONA DEPARTMENT OF ANIMAL SCIENCES

Applications are invited for a faculty position in environmental physiology in the Department of Animal Sciences at The University of Arizona beginning July 1, 1998. The successful candidate will be expected to develop an independent and innovative research and teaching program in the area of environmental physiology, with emphasis on effects of environmental factors on organismal biology of domestic animals.

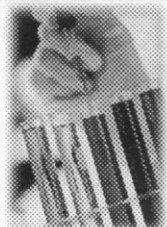
Candidates should have a D.V.M. or Ph.D. in a related biological discipline. Preference will be given to candidates that can use modern tools of cellular and molecular biology, that possess a strong record of research and publication, and that have experience in the acquisition of extramural funding.

The successful applicant will complement existing departmental strengths in reproductive biology, nutritional and mammary gland biology, molecular genetics, and heat stress physiology. Expertise in development of animal models is of particular interest. We seek an individual who can provide leadership in his/her area of interest, interact with the livestock industry, as well as develop close collaborations with multidisciplinary programs in biological and environmental sciences that currently exist at the University of Arizona.

Responsibilities include advising, recruiting, teaching undergraduate and graduate courses, participation in curricular development, and training of graduate students. Applications at all academic levels are invited. Candidates are invited to send their curriculum vitae with a description of their research and teaching interests, supporting documents, and arrange to have letters from three references sent to: Chair, Search Committee, Department of Animal Sciences, The University of Arizona, Shantz Building, Room 203, P.O. Box 210038, Tucson, AZ 85721-0038. Review of applications will begin April 1, 1998, and continue until the position is filled. *The University of Arizona is an Affirmative Action/Equal Employment Opportunity Employer. Minorities/Women/Disabled/Veterans.*

ASSISTANT PROFESSOR. The Diabetes, Obesity, and Nutrition Division and the Joslin Center for Diabetes at the University of Maryland School of Medicine is seeking an outstanding Ph.D. and/or M.D. **MOLECULAR/CELL BIOLOGIST** to investigate the molecular basis of diabetes. Specific areas of interest include genetic approaches, pancreatic beta-cell growth and maintenance, and insulin signaling/resistance. The successful candidate will work closely with an interdisciplinary research team of basic scientists and clinical investigators. Previous postdoctoral research experience in this area as well as a strong peer-reviewed publication record is required. After a period of seeding, the applicant will be expected to successfully compete for research grants in order to maintain a funded research program. Qualified applicants are encouraged to submit their curriculum vitae and names of at least three references to: Alan Shuldiner, M.D., c/o JoAnn Gibbs, Academic Programs Office, Department of Medicine, Room N3E10, University of Maryland Medical Center, 22 South Greene Street, Baltimore, MD 21201. *The University of Maryland, Baltimore, encourages women and minorities to apply and is an Affirmative Action/Equal Employment Opportunity/ADA Employer.*

ANATOMICAL INSTRUCTOR (ASSISTANT SPECIALIST). The Department of Cell Biology and Anatomy, College of Medicine, University of Arizona is seeking an Anatomical Instructor (non-tenure-track) to participate in teaching human gross anatomy to medical, graduate, and undergraduate students. Required: Ph.D. in anatomy or physical anthropology and a minimum of two years of experience in teaching human anatomy to medical students. Preferred: teaching experience involving problem-based and computer-assisted anatomical education. Applicants must send curriculum vitae, referencing Job #996740, with a statement of professional goals and request that three letters of reference be sent to: Dr. Robert S. McCuskey, Department of Cell Biology and Anatomy, P.O. Box 245044, University of Arizona HSC, Tucson, AZ 85724-5044. For more information, see website: <http://w3.arizona.edu/~ahschr/jobs.htm>. Application review begins April 24, 1998, and continues until position is filled. *The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minorities/Women/Disabled/Veterans.*



ANIMAL HEALTH Research & Development

FORT DODGE ANIMAL HEALTH, a division of American Home Products Corporation, has several biological R & D positions available at our Fort Dodge, Iowa facility. We are currently seeking:

MANAGER VACCINE DEVELOPMENT

Requirements include a Ph.D. in a related field with 4 years of industry experience or B.S./M.S. with at least 10 years of industry experience. Experience in managing intermediate or senior level scientists and Bovine and/or Porcine Virology experience necessary.

MANAGER POULTRY RESEARCH AND DEVELOPMENT

DVM or Ph.D. and at least 3 years industry experience licensing poultry vaccines required.

PROJECT LEADER FELINE VIROLOGY/BIOTECHNOLOGY

Candidates must have a Ph.D. in Microbiology, Virology, or related discipline. Experience in animal virology and various expression systems. A strong record of scientific achievements and excellent ability in independent research also necessary.

TECHNICIANS

B.S./M.S./Ph.D. in Chemistry, Biology, or other scientific disciplines; no experience required.

Fort Dodge Animal Health is one of the world's leading manufacturers of veterinary pharmaceuticals and biologicals. This is an opportunity to work with a team of dedicated scientists in a state-of-the-art facility. Send resume, including salary requirements, to:

Director, Human Resources

FORT DODGE ANIMAL HEALTH

P.O. Box 518

Fort Dodge, IA 50501

Fax: (515) 955-9144

E-mail: cwwood@fdah.com

Pre-employment physical, drug screening, background check required. eoe m/f/d/v



DIRECTOR

Fermi National Accelerator Laboratory



The Fermilab Board of Overseers of Universities Research Association, Inc. (URA) has initiated a search for a new Director of the Fermi National Accelerator Laboratory in Batavia, Illinois. The position, for a term of five years, renewable, will be available July 1, 1999. The Search Committee welcomes applications and nominations for this position. It is recommended that such applications or nominations be accompanied by curriculum vitae and other information bearing on the candidates' qualifications for the Directorship. Relevant qualifications include scientific stature, leadership capability, and management skills. Communications should be sent as soon as possible, preferably before June 12, 1998, and should be addressed to:

Ezra Heitowit
Vice President
Suite 400
1111 19th Street, N.W.
Washington, DC 20036
e-mail: search@ura.nw.dc.us

A consortium of eighty-seven major research universities, URA operates Fermilab under contract with the U.S. Department of Energy.

URA is an Equal Opportunity Employer.



City of Hope

National Medical Center/
Beckman Research Institute

Vaccine Research with CMV as the model in the Laboratory of Dr. Diamond.

Current work involves refining approaches in the delivery of peptide vaccines which will amplify CTL responses against CMV in immunosuppressed and immunocompetent persons. Opportunities exist using transgenic models (see Blood 90:1751-1767) and studies involving clinical cohorts including BMT recipients, AIDS patients and other at-risk groups. Recent NIH funding for clinical trials of the HLA A2.1-restricted vaccine in volunteers, BMT recipients and AIDS patients has recently been awarded. The awards are for 4-(AIDS) and 5-year (volunteers, BMT) periods. Additional studies examining the immunity to CMV in AIDS patients on triple-drug therapy are also ongoing.

We are currently recruiting for the following positions:

- **PEPTIDE CHEMIST, Ph.D.:** Seeking a research fellow with a strong background in peptide and/or protein chemistry with an interest in solving problems in immunology. The project involves vaccine development using lipopeptide strategies involving complex vaccine peptide molecules which will be synthesized in-house characterized by analytic methods and tested in murine models. This individual will also interact with other research fellows in providing peptides for their in vivo and in vitro studies. **Position #19952.**
- **CELLULAR IMMUNOLOGIST, Ph.D.:** Seeking a research fellow with a strong background in cellular immunology, virology or molecular biology. The research projects involve constructing transgenic models and testing peptide vaccines in those models. The research projects target cytomegalovirus and HIV immunity. **Position #19955.**
- **CELLULAR IMMUNOLOGIST, RESEARCH ASSOCIATE:** A cellular immunologist is needed to supervise several vaccine trials involving novel lipopeptide vaccines specific for cytomegalovirus. This individual will be responsible for carrying out experiments to determine the clinical efficacy of lipopeptide vaccines against cytomegalovirus in volunteers and potential bone marrow transplant recipients. A background in cellular immunology and virology or molecular biology is preferred. **Position #19953.**
- **MOLECULAR BIOLOGIST, RESEARCH ASSOCIATE:** An individual with strong skills in molecular biology is being sought to interface with several post-doctoral fellows in projects involving mapping T-cell epitopes and constructing transgenic mouse strains. This individual will also have responsibilities in regard to maintaining the molecular biology facility of the laboratory and will require good communication skills. The job level is at Research Associate II. This individual will also construct various herpes and pox virus models in support of vaccine development in the laboratory. **Position #19954.**
- **VIROLOGIST, Ph.D.:** Seeking a research fellow with a background in virology of herpes viruses or lentiviruses who also has experience in cellular immunology to supervise a series of experiments involving determination of immunity to cytomegalovirus in AIDS patients. This individual will conduct in vitro experiments measuring immune parameters before and after vaccination with experimental lipopeptide vaccine. A strong background in cellular immunology and virology is required. **Position #19956.**

Interested candidates must reference the Position # for which they are applying on all correspondence and send curriculum vitae, a summary of research experience/interests and contact information of three references to:

City of Hope
Attn: Shelley Tam, Sr. Recruiter
1500 East Duarte Road
Duarte, CA 91010
FAX (626) 301-8182
E-mail: COHAPPLY@smtplink.coh.org
EOE.

POSITIONS OPEN

DNA Plant Technology Corporation, a leading agricultural biotechnology company, has three openings for scientists in research groups developing novel varieties of fruits and vegetables.

PLANT PATHOLOGIST

We are seeking a Ph.D. in plant pathology with two-plus years of postdoctoral experience to evaluate strawberry and grape varieties from transgenic and traditional breeding programs for disease resistance. Applicants will develop *in vitro* assays for pathogen growth inhibition and will design, conduct, and assess disease resistance trials in the greenhouse and field. Candidate must have experience with common fungal pathogens as well as statistical design and analysis and data management. Strawberry and/or grape agronomy, culture, and production experience is beneficial. Please refer to code 98PATH.

PLANT MOLECULAR BIOLOGIST

We are seeking a Ph.D. in molecular biology with two-plus years of postdoctoral experience to investigate the molecular mechanisms of glowering control in crop plants as well as other aspects of crop improvement. Applicants should have demonstrated expertise in a wide array of molecular biological techniques including cloning, sequencing, RT-PCR, hybridization, plasmid constructions, and library construction/screening. Additional experience in plant microtechniques such as tissue embedding, microtomy, and *in situ* hybridization is highly desired. Please refer to code 98MOLBIOL.

All candidates should have the ability to work in a highly interactive environment and keep abreast of current advances in plant sciences. Good oral and written communication skills are required.

Qualified applicants should mail résumé with the names of three references to:

DNA Plant Technology Corporation
6701 San Pablo Avenue
Oakland, CA 94608

DNAP is an Equal Opportunity Employer.

ASSISTANT MEMBER. New York Blood Center is the nation's preeminent independent blood research, collection, and distribution organization. Currently, we're seeking a bright, dynamic research-oriented Physician to perform research in conjunction with medical/clinical work. As an integral member of the Department of Immunogenetics, you will be responsible for conducting clinical follow-up on all placental cord blood transplants performed through the Placental Blood Program. This challenging position requires an M.D. and the successful completion of Residency and Fellowship. American Board certification in pediatric hematology-oncology as well as at least three years of experience in clinical bone marrow transplantation. A proven track record of successful research related to bone marrow replacement is also essential as are excellent decision-making skills. We offer a competitive salary and a comprehensive benefits package. For consideration, please send curriculum vitae to:

Human Resources Department—MK
New York Blood Center
310 East 67th Street
New York, NY 10021
FAX: 212-570-3195

Equal Opportunity Employer/Minority/Females/Disabled/Veterans.

PART-TIME MICROSCOPE SALES/SCIENTISTS

Manufacturer of a new, high-resolution optical 3-D microscope seeks Microscopists with discretionary time interested in supplementing income through equipment sales and application development. Ideal candidate will continue to perform research in a discipline benefiting from 3-D analysis. Compensation based on ability to develop and publish new applications for technology and to assist in sales of microscopes to other scientists.

Send résumé to:

InGen Corporation
235 Montgomery Street
Suite 300
San Francisco, CA 94104

POSITIONS OPEN

**NYU
Medical
Center**

INTELLECTUAL PROPERTY MANAGER

As Intellectual Property Manager, you will oversee all intellectual property matters for New York University, NYU School of Medicine, and its affiliated institutions. This includes assessing the protectability and commercial potential of new invention disclosures; obtaining and maintaining intellectual property protection through external counsel; and providing assistance to fellow technology managers in developing and implementing strategies to commercialize the intellectual property assets of the University.

This key position requires a Bachelor's degree in business (advanced degree in life sciences preferred) and at least three years of experience, to include patent prosecution of university research results and professional work in an intellectual property law firm. Excellent interpersonal, communication, and organizational skills are also essential.

NYU Medical Center offers an excellent salary and benefits package, including four weeks paid vacation and tuition remission at NYU. Send your résumé and salary requirements to: **Doriane Gloria, Human Resources Department, New York University Medical Center, 550 First Avenue, New York, NY 10016.** Visit our website: <http://jobs-www.med.nyu.edu/Employment>. *Equal Opportunity Employer.*

TRIBECA PHARMACEUTICALS

TriBeCa Pharmaceuticals is a newly formed company focused on target discovery to combat human viral pathogens. Located in the exciting SoHo district of New York City, TriBeCa is currently seeking two candidates to join their anti-herpesvirus group.

A RESEARCH SCIENTIST is sought with a Ph.D. in molecular virology or a related discipline and up to three years of relevant postdoctoral experience. This individual will help identify and characterize cellular or viral partners that interact with viral gene products. Prior experience with protein-protein interactions and herpesviruses or other large DNA viruses is desired.

A SENIOR RESEARCH ASSOCIATE position is available for an experienced Technical Assistant. Candidates will have a B.S. or M.S. degree in molecular biology or a related field and five-plus years of research experience. Facility with herpesviruses, mammalian cell culture, bacterial fusion protein expression, or production and characterization of monoclonal antibodies is useful.

TriBeCa Pharmaceuticals is a growing venture that offers outstanding salary and benefit packages, exceptional advancement opportunity, and an opportunity to live and work in one of the world's most exciting cities. Mail or FAX curriculum vitae and a list of references to the attention of: **Dr. A. Marchini, TriBeCa Pharmaceuticals, 180 Varick Street, Suite 701, New York, NY 10014.** FAX: 212-645-2054.

TENURE-TRACK ASSISTANT PROFESSOR in biology. Ph.D. to primarily teach comparative morphology, animal physiology, and supervise undergraduate research. August 15, 1998. A maturing and enthusiastic Christian faith and commitment to the mission of a residential, evangelical Christian university essential. E-mail or FAX letter and curriculum vitae to: **Dr. Glenn Sumrall, Provost, LeTourneau University, e-mail: sumrallg@letu.edu; FAX: 903-233-3227.** Applicants agreeing with mission of LeTourneau University are considered without regard to race, age, sex, disabled condition, or national origin.

BIOMECHANICS LABORATORY DIRECTOR

Full-time Biomechanics Researcher with Ph.D. and demonstrated postdoctoral experience in orthopaedics or related scientific studies. Strong academic orientation with an aptitude for and experience in teaching and research activities. Proficiency with Instron equipment preferred. Salary commensurate with experience. Please submit curriculum vitae by May 1, 1998, to: **Scott D. Matthews, Administrator, Department of Orthopaedics, University of Colorado Health Sciences Center, 4701 East 9th Avenue, Box E-203, Denver, CO 80262.**

POSITIONS OPEN

ASSISTANT PROFESSOR BIOLOGY

The Program in Biology in the School of Natural and Applied Sciences seeks applicants for a broadly trained **PHYSIOLOGIST** with a strong background in human biology for a tenure-track Assistant Professor of biology to begin in August 1998. Applicants must have a Ph.D. in biology or a closely related area, a strong commitment to teaching at the undergraduate and graduate level, and plans to develop an active research program. Teaching responsibilities will include human physiology lecture and laboratory courses that may be scheduled for evenings and/or Saturdays. The position also involves the supervision of undergraduates and graduates in laboratory research. Preference will be given to candidates with postdoctoral experience and at least one year of teaching experience. Final determination will require an on-campus interview and include a research presentation. Send a letter of application, curriculum vitae, three letters of reference, and a statement of teaching and research philosophy to: **Dr. Cynthia L. Howard, Chair of the Biology Faculty Search Committee, Office of the Dean, School of Natural and Applied Sciences, Box 415, University of Houston-Clear Lake, 2700 Bay Area Boulevard, Houston, TX 77058.** The University of Houston-Clear Lake is an upper-level university. The biology program offers B.S., B.A., and M.S. degrees. This position will remain open until filled.

The University of Houston-Clear Lake is an Affirmative Action/Equal Opportunity Employer supporting work force diversity and does not discriminate on the basis of race, sex, age, religion, national origin, disability, or veteran status. The university hires only individuals authorized to work in the United States and does not observe hiring practices that will result in the displacement of qualified U.S. citizens or permanent residents. We reserve the right to extend searches or not fill positions.

ASSISTANT PROFESSOR OF NUTRITION UNIVERSITY OF FLORIDA


Twelve-month, tenure-track appointment. Ph.D. in nutritional biochemistry, biochemistry, or related area with demonstrable interest in nutrition research; postdoctoral experience preferred. Duties include teaching undergraduate and graduate courses, and developing an extramurally funded research program in an area of nutritional biochemistry that complements existing programs; preference given to candidates who use modern molecular/biochemical techniques. Submit a letter of application by June 15, 1998, a curriculum vitae, an essay describing research and teaching interests, representative publications, and arrange for three letters of recommendation to: **Dr. Susan S. Percival, Food Science and Human Nutrition, P.O. Box 110370, University of Florida, Gainesville, FL 32611.** UF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH AND DEVELOPMENT SCIENTIST MOLECULAR BIOLOGY

The world's leading producer of transgenic models is seeking a Ph.D.-level **MOLECULAR BIOLOGIST** with industrial experience to assume responsibility for research and development of genotyping methods including PCR and Southern blots. Working knowledge of rodent genetics and ELISA techniques desirable. Interface to transfer assays into GLP production QC operation. The position will support our Germantown and Rensselaer facilities. Send résumé and salary requirements in confidence to: **Human Resources Director, Taconic, 273 Hover Avenue, Germantown, NY 12526.** FAX: 518-537-7287. We provide competitive salary and benefits packages. Taconic is an Equal Opportunity/Affirmative Action Employer.

MALARIA PROGRAM NAVAL MEDICAL RESEARCH INSTITUTE

POSTDOCTORAL POSITIONS are available immediately to study the molecular biology and immunology of malaria. Doctoral degree with experience in molecular biology or cellular immunology is essential. Send curriculum vitae and names of three references to: **Dr. Stephen L. Hoffman or Dr. William O. Rogers, Malaria Program, Naval Medical Research Institute, 12300 Washington Avenue, Rockville, MD 20852.** FAX: 301-295-6171; e-mail: rogersb@nmri.mil. nmmc.navy.mil.



**St. Jude Children's
Research Hospital**
ALSAC • Danny Thomas, Founder

**POSTDOCTORAL
POSITIONS
REGULATION OF
APOPTOSIS**

Funded postdoctoral positions are immediately available to study novel signaling pathways that regulate apoptosis in hematopoiesis, leukemia and during development. Candidates should have a strong background in molecular and cellular biology. St. Jude Children's Research Hospital offers an exciting research environment and competitive salary and training packages for fellows. Please send letter of interest and curriculum vitae to:

John L. Cleveland, Ph.D.
Department of Biochemistry
St. Jude Children's Research Hospital
332 N. Lauderdale Avenue
Memphis, TN 38105
E-mail: john.cleveland@stjude.org
Web site: www.stjude.org

Equal Opportunity/
Affirmative Action Employer

Opportunities with ZymoGenetics

ZymoGenetics, Inc. is a biotechnology company located in Seattle's historic Lake Union Steam Plant. Our mission is to identify protein therapeutic opportunities and to take selected projects as far as clinical proof of concept studies. We are currently seeking qualified candidates for the following position:

Scientist/Senior Scientist In Vivo Biology Group

We are seeking an in vivo biologist to join a team testing novel proteins in animals to determine their functions and possible therapeutic utility. Responsibilities include design, performance and analysis of animal experiments to identify biologic activities of protein agents as well as identification and use of appropriate animal models for evaluation of therapeutic potential. Strong written and oral communication skills are required. Versatility and flexibility are essential, and you must be able to work in multidisciplinary teams. Expertise in one or more of the following areas is useful: evaluation of transgenic and knockout phenotypes, inflammation, tumor cell growth and metastasis, developmental biology. Applicants should have a Ph.D., DVM, or MD and 2-6 years academic or industrial experience in physiology, pharmacology or pathology.

As a subsidiary of NOVO NORDISK, the world's largest producer of industrial enzymes, ZymoGenetics offers an exciting environment characteristic of a small research and development company, along with the scope and stability of a large pharmaceutical corporation. We also offer intellectual challenge, state-of-the-art facilities and a generous benefits package. Please apply by sending a cover letter noting **Job reference #35N498** and a detailed resume of your work experience and academic background to: ZymoGenetics, Inc., Human Resources, 1201 Eastlake Ave. East, Seattle, WA 98102. ZymoGenetics is committed to equal opportunity and diversity.

ZYMOGENETICS

Senior Biochemists/ Molecular Biologists

Located in the San Francisco Bay Area, Lynx is currently implementing its novel, proprietary, massively parallel DNA cloning and sequencing technologies to address a number of exciting applications. These include gene discovery, gene expression profiling, very high resolution physical mapping of genomes, and the identification of individual genetic variations.

The scientists we are seeking are experienced post-doctoral biochemists and/or molecular biologists with solid backgrounds in nucleic acid enzymology. Experience with conventional DNA sequencing is desirable but not necessary. They will join an interdisciplinary team of biologists, molecular biologists, chemists, and electrical, mechanical and software engineers. Their roles, initially, will be to understand and help optimize further the automated biochemical reactions and enzymatic processes that are the bases of our revolutionary technologies. Later, they will be expected to spearhead exciting new applications of these technologies to areas enabled by the refinements and extensions they will have contributed.

We offer an excellent compensation and benefits package. To apply, please send your resume to: Lynx Therapeutics, Inc., Attn: Job#SCI0410-SSB, 3832 Bay Center Place, Hayward, CA 94545; fax: (510) 670-9302. EOE

LYNX
THERAPEUTICS, INC.

RESEARCH SCIENTIST Immunology

NEUROCRINE BIOSCIENCES, INC. (NBI) is a leading neuroimmunology company focused on the discovery and development of novel therapeutics to treat diseases and disorders of the central nervous (CNS) and immune systems.

You will investigate the mechanism(s) of action of altered peptide ligands (APL) in regulating the development of autoimmune diseases such as Type 1 diabetes and multiple sclerosis. Experience in inflammatory and/or neuroinflammatory diseases is desired. The successful candidate must also demonstrate an ability to publish research activities in peer-reviewed journals. A Ph.D. in Biology, Immunology, or related fields is required.

NBI is located in the research hub of San Diego near UCSD, The Salk Institute, and The Scripps Research Institute. In addition to a competitive compensation and benefits package, our company offers a new, state-of-the-art research facility to be occupied by the Fall. Please submit your CV along with 3 references (name, address, phone, and fax) to: Neurocrine Biosciences, Inc., Human Resources/Ref: SC-PC, 3050 Science Park Road, San Diego, CA 92121-1102 or fax (619) 658-7602. E-mail resumes to: hr@neurocrine.com. EOE.

Visit our website:
www.neurocrine.com



Neurocrine
BIOSCIENCES

POSITIONS OPEN

National Institute for Occupational Safety and Health (NIOSH) has established a new, state-of-the-art research facility in Morgantown, West Virginia to conduct research on the molecular mechanisms underlying adverse health effects associated with workplace exposures.

The Toxicology and Molecular Biology Branch is seeking a **TEAM LEADER** to establish a laboratory-based research program that will apply cellular, molecular, and/or genetic approaches to problems in occupational safety and health. NIOSH Team Leaders are expected to have a proven record of outstanding independent research and the ability to mentor and motivate technical and postdoctoral team members. The successful candidate will have opportunities to collaborate with other Branch Investigators conducting research programs in immunotoxicology, neurotoxicology, molecular toxicology, dermatotoxicology, and molecular carcinogenesis.

Applicants should send a curriculum vitae and a cover letter describing the candidate's area of research and how their expertise will be applied to occupational safety and health issues to:

Ms. Cheryl Fisher
Toxicology and Molecular Biology Branch
National Institute for Occupational Safety and Health
m/s 3014
1095 Willowdale Road
Morgantown, WV 26505

CDC/NIOSH is an Equal Opportunity Employer and provides a smoke-free workplace.

POSTDOCTORAL POSITION with Dr. Susan E. Kane. The Department of Cell and Tumor Biology at the City of Hope National Medical Center/Beckman Research Institute seeks a Research Fellow to study hematopoietic progenitor cell gene therapy, with a focus on using the human multidrug resistance gene (MDR1) as a chemoprotective gene and an *in vivo* selectable marker. Experience working with hematopoietic progenitor cells (isolation, long-term culture, colony assays, mouse models) and/or a background in hematopoietic stem cell biology is required. Position requires a Ph.D. in a relevant subject area; some prior postdoctoral experience preferred. Salary up to \$40,000, commensurate with experience, plus a generous benefits package. Interested candidates should send curriculum vitae, a summary of research experience/interests, and contact information of three references to: Shelley Tam, Senior Recruiter, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, CA 91010. FAX: 626-301-8182; e-mail: cohapply@smtplink.coh.org. Please reference #10471. *Equal Opportunity Employer.*

CALIFORNIA START-UP OPPORTUNITY

Well-funded new company exploring revolutionary approaches to the diagnosis and treatment of cancer.

DIRECTOR OF BIOLOGICAL RESEARCH

Broad science background: molecular biology, immunohistochemistry, and cell biology. Translational research, clinical to bench as well as bench to clinic. Ten-plus years of experience in industrial environment or academic research project management.

STAFF SCIENTIST

Experience in molecular biology, immunohistochemistry, and cell biology. Three-plus years of experience in industry.

Send curriculum vitae and references to: Susan Love, M.D., P.O. Box 846, Pacific Palisades, CA 90272. FAX: 310-230-1612; e-mail: julian@meecker.net

POSTDOCTORAL POSITION in molecular endocrinology. Regulation of estrogen-responsive genes. Experience with cDNA subtractive cloning, run-on transcription, and *in vivo* footprinting desirable. NIH-funded position. Send curriculum vitae and three letters of reference to: Dr. Marilyn Evans, Department of Biochemistry, P.O. Box 9142, Robert C. Byrd Health Sciences Center, Morgantown, WV 26506-9142. E-mail: mevans@wvu.edu. *West Virginia University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Position available immediately to study store-operated calcium currents in neurons. Ph.D. or equivalent degree and experience with patch clamp recordings from mammalian neurons required. Send curriculum vitae and names of references to: Dr. J. Lansman, Department of Cellular and Molecular Pharmacology, University of California, San Francisco, CA 94143-0450. E-mail: jeffl@itsa.ucsf.edu.

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** are available to study molecular, cellular, and tissue aspects of skin disease. The NIH-funded Training Program in Investigative and Molecular Dermatology, in conjunction with the Case Western Reserve University Skin Diseases Research Center, offers a top-rated collaborative environment for research training in a wide range of areas, including molecular dermatology, immunodermatology, skin carcinogenesis, photobiology, skin pharmacology, and cutaneous fungal diseases. Research is conducted under the supervision of experienced faculty members known for their excellent teaching skills and for their ability to foster research careers in a friendly and supportive environment. Research training may be coordinated with a clinical residency in dermatology. Candidates must have a M.D., Ph.D., or M.D.-Ph.D. degree and be a U.S. citizen or permanent resident. Send curriculum vitae and outline of career plans to: Hasan Mukhtar, Ph.D., Professor and Research Director, Department of Dermatology, Case Western Reserve University, 11100 Euclid Avenue, Cleveland, OH 44106. Telephone: 216-368-1127; FAX: 216-368-0212; e-mail: hxm4@po.cwru.edu.

Case Western Reserve is an Affirmative Action/Equal Opportunity Employer.

EXPERIMENTALISTS AND THEORISTS POSTDOCTORAL AND RESEARCH FACULTY Physical Chemistry, Biophysics, and Physics

The Wilson group, at the University of California, San Diego, Department of Chemistry and Biochemistry, has positions available for exceptionally talented scientists in the following areas: ultrafast X-ray diffraction and absorption applied to chemical and biochemical dynamics and function, dynamics of biomolecular and biological processes (including interneuronal communication and function) imaged using ultrafast microscopy, and theoretical studies related to these areas. For more information about these positions and the group, or to receive application process information, visit our website: <http://www.wilson.ucsd.edu>; e-mail: wjgibops@ucsd.edu. Positions commensurate with experience and qualifications, with salaries based on University of California payscales.

Affirmative Action/Equal Opportunity Employer.

NIH-FUNDED POSTDOCTORAL POSITIONS

Several positions available immediately to study immunotherapy and gene therapy for cancer based on vaccines and bone marrow transplantation. Murine tumor models employed in preclinical studies. Ph.D. or M.D. degree and experience in tumor immunology required; expertise in hematology and gene transfer desirable. Please send curriculum vitae and three letters of reference to: Dr. James J. Mulé, Director, Tumor Immunology Program, University of Michigan Comprehensive Cancer Center, 1520 MSRB-I, Box 0666, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0666. FAX: 313-936-2990; e-mail: jimmule@umich.edu.

The University of Michigan is an Equal Employment Opportunity/Affirmative Action Employer and strongly encourages women and minority candidates to apply.

POSTDOCTORAL POSITION. Department of Neurology, Harvard Medical School. Position immediately available to study the molecular mechanisms of neuronal migration in vertebrates. Strong background in molecular, cellular, and biochemical techniques required. Send research interests, curriculum vitae, and contact information for three references to: Gabriel Corfas, Ph.D., Division of Neuroscience, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115. Telephone: 617-355-7364; FAX: 617-738-1542; e-mail: corfas_g@al.tch.harvard.edu. *Equal Opportunity Employer/Affirmative Action.*

POSTDOCTORAL POSITION in molecular biology/gene targeting available immediately to develop a mouse model for pyruvate dehydrogenase complex deficiency and to investigate its consequences on brain development. Applicant should have experience in molecular biology and cell biology. Send curriculum vitae and names of three references to: Dr. Mulchand Patel, Department of Biochemistry, SUNY Buffalo, 140 Farber Hall, 3435 Main Street, Buffalo, NY 14214. FAX: 716-829-2725; e-mail: m Patel@acsu.buffalo.edu. *State University of New York at Buffalo is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION TBP AND TAF STRUCTURE-FUNCTION STUDIES

A Postdoctoral position is available to examine the role of the TATA-Box Binding Protein TBP and its associated factors (TAFs) in transcription initiation complex formation in *Saccharomyces cerevisiae* (see J. Biol. Chem. 269:28335; 272:9436; Proc. Nat. Acad. Sci. USA 92:8224; Biochemistry 34:8005; Mol. Cell Biol. 17:3081). We are currently using a combination of biochemical, genetic, and biophysical methods to study the interactions of these proteins with TBP, DNA, and other transcription factors. Interested parties should send a curriculum vitae and arrange to have three letters of reference sent directly to: Dr. Tony Weil, Department of Molecular Physiology and Biophysics, Vanderbilt University, School of Medicine, Nashville, TN 37232-0615. FAX: 615-322-7236.

Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the mechanism of action of neuropeptides on lipid-derived second messengers production and their cross-talk with cAMP and cGMP in iris smooth muscle and muscle cells. Candidate should have a Ph.D. in biochemistry or pharmacology. Experience in molecular characterization of signal transduction pathways and publications in this area are desirable. Send curriculum vitae, brief description of research interests, and addresses of three references to: Professor Ata Abdel-Latif, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100. E-mail: labdel@mail.mcg.edu.

The Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS IN GENE THERAPY UNIVERSITY OF WASHINGTON

Positions are available immediately to develop and test new viral vectors for use in gene therapy. Vectors based on adeno-associated virus and alternative retroviruses are currently under investigation. Methods are being developed for the transduction of nondividing cells, and the modification of homologous chromosomal genes by gene targeting. Send curriculum vitae and the names of three references to: David W. Russell, Department of Medicine, Mail-stop 357720, University of Washington, Seattle, WA 98195. E-mail: drussell@u.washington.edu.

POSTDOCTORAL POSITIONS TO STUDY SIGNAL TRANSDUCTION IN LYMPHOID CELLS

Several positions available immediately to study (1) the function of 14-3-3 in Raf activation, (2) the biochemistry of T cell activation and costimulation. Ph.D. and experience in molecular biology, protein biochemistry, or enzymology is required. Send curriculum vitae, references, and description of research experience to: Dr. Andrew S. Shaw, Center for Immunology, Department of Pathology, Box 8118, 660 South Euclid, Washington University, St. Louis, MO 63110. E-mail: shaw@immunology.wustl.edu.

AIDS research POSTDOCTORAL FELLOWSHIPS. The University of California School of Medicine, San Francisco is offering Postdoctoral Fellowships for AIDS-related research to prepare Physicians for a career in basic research focusing on the biologic, immunologic, and molecular features of HIV infection. Applicants must possess an M.D. or equivalent degree, must be a U.S. citizen or permanent resident, and have prior experience in laboratory-based research. Write for application package: Christine Beglinger, Division of Hematology/Oncology, Department of Medicine, University of California, San Francisco, San Francisco, CA 94143-1270. *Minorities encouraged.*

POSTDOCTORAL POSITION available to study structure/function relationships in a newly recognized family of prokaryotic and eukaryotic enzymes that contain covalently bound flavin, oxidize various secondary amino acids and, in certain cases, contribute to the tetrahydrofolate 1-carbon pool. Candidates should have a strong background in enzymology and recombinant DNA techniques. Send curriculum vitae, including names and telephone numbers of three references, to: Dr. Marilyn S. Jorns, Allegheny University of the Health Sciences, Department of Biochemistry, 2900 Queen Lane, Philadelphia, PA 19129. E-mail: jornsm@auhs.edu.

Quality Biotech Inc., a ViroMed Biosafety company, has announced the opening of a new Analytical Services Department. This department will provide GLP/GMP compliant contract testing services for the biotech and pharmaceutical industry. As a result of this expansion, we have the following opening:

LAB DIRECTOR Analytical Services

As Lab Director, you will be responsible for the planning and implementation of the overall testing strategy as well as assay development and validation for the Analytical Services Department. In addition, you will manage the group's technical staff, serve as Study Director and interact with clients and regulatory authorities.

Qualified candidate will have a Ph.D. in the biological or chemical sciences, 5 or more years of experience working in and managing an analytical lab in a biopharmaceutical or contract testing environment and a strong background in GMP/GLP guidelines. In addition, you should have a proven record of independent scientific leadership, effective management skills with an emphasis on team building and excellent communications skills.

Quality Biotech is located in the Greater Philadelphia region - an area rich in scientific, cultural, and recreational diversity. We offer excellent opportunities for professional growth, a competitive salary, relocation assistance, health benefits, and 401(K) plan. Send c.v. and salary requirements, to: Quality Biotech Inc., Attn: Seetharam/HR, 1667 Davis Street, Camden, NJ 08104. FAX: (609) 342-8078. E-Mail: hr@qualitybio.com/ EOE M/F/D/V



Quality Biotech*
Biotechnology Testing Services

EUROPEAN OPPORTUNITIES



Royal College of Surgeons in Ireland

Applications are invited for the following posts in the Department of Medicine:

(i) Senior Scientist (Scientific Officer)

It is envisaged the successful candidate will have an interest in the area of cell/molecular biology, and/or protein biochemistry to complement the current research interest with the Department of Medicine. A prior track record of innovative research, substantive publications and independent grant funding acquisition is desirable. This is a permanent appointment.

(ii) Postdoctoral Scientist

Tenable for a period of 5 years, it is envisaged the successful candidate will have an interest in the area of cell/molecular biology, and/or protein biochemistry to complement the current research interest with the Department of Medicine. A prior track record of innovative research is desirable.

Intending candidates who would like further information may contact Prof. G. McElvaney, Dept. of Medicine, Beaumont Hospital; Tel: +353-1-837 7755.

Application Procedure

Prior to application, further details may be obtained from the Human Resources Department. Interested candidates should forward a detailed Curriculum Vitae (5 copies) together with names of two referees to:

Human Resources Department, Royal College of Surgeons in Ireland, 123, St. Stephen's Green, Dublin 2, Ireland.

Tel: +353 - 1 - 402 2339 email: humanres@rcsi.ie

Closing Date is Friday, 24th April 1998.

RCSI is an equal opportunities employer

FACULTY POSITIONS

Pharmacology & Cell Biophysics University of Cincinnati College of Medicine

The Department of Pharmacology & Cell Biophysics is recruiting new tenure-track faculty members. We are primarily seeking Assistant Professors. Outstanding candidates at all levels will be considered. We are expanding beyond established strengths in cardiovascular and ion-channel pharmacology. Core facilities in the College of Medicine include transgenic and knockout mouse models, DNA synthesis and sequencing, mouse physiology and pathology, microscopy, and a state-of-the-art NMR facility (five instruments including 800 MHz).

Successful applicants are expected to bring or develop a strong, independent research program and contribute to our medical and graduate teaching programs.

While we will consider individuals with research programs in any area of modern molecular, cellular, or systems pharmacology, we are particularly interested in individuals with special research emphasis and expertise in:

- biophysics / structural biology (especially x-ray crystallography)
- signal transduction
- neuropharmacology
- cancer pharmacology

Generous start-up resources, laboratory and office spaces are available. More information may be found at: <http://www.med.uc.edu/pharmacology>.

Applicants should send curriculum vitae, concise statements of research accomplishments and future plans, and the names of three qualified references to: John E. Maggio, Professor and Chair, Department of Pharmacology & Cell Biophysics, University of Cincinnati College of Medicine, P.O. Box 670575, Cincinnati, OH 45267-0575 USA.

Review of applications will begin May 1 and continue until the positions are filled.

The University of Cincinnati is an Equal Opportunity Employer.

EUROPEAN OPPORTUNITIES



University of Durham

DEPARTMENT OF BIOLOGICAL SCIENCES

Postdoctoral Research Associates in Molecular Biology

£16,927 - £21,016 p.a.

Three postdoctoral positions are immediately available to investigate three different research areas within a multidisciplinary team.

1. The structure function relationship of acyltransferases, which are involved in both signal transduction and triglyceride biosynthesis, using domain swap, site directed mutagenesis and forced evolution.
2. Cloning and manipulation of yeast and plant P450 genes involved with hydroxy fatty acid formation which are important as raw materials for the chemical industry.
3. Manipulation of the lipid oxidation pathways of yeast by gene disruption using homologous recombination to provide activated fatty acids for the chemical industry.

The posts are for 3 years and will allow for longer term interactions with both academia and industry. Experience in molecular biology is essential but does not have to be in yeast or plants.

Informal enquires can be made to Professor Toni Slabas
e-mail: A.R.Slabas@durham.ac.uk Further details can be obtained from <http://www.dur.ac.uk/~db10www/>

Further details and an application form may be obtained from the Director of Personnel, University of Durham, Old Shire Hall, Durham DH1 3HP (tel: 0191 374 7258, fax: 0191 374 7253 or e-mail: Acad.Recrut@durham.ac.uk).

Closing date: 30 April 1998. Please quote reference A761C.

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION UNIVERSITY OF MINNESOTA Department of Laboratory Medicine and Pathology

A full-time annually renewable position at rank of Research Associate is available approximately July 1, 1998. This individual will study extracellular matrix molecules, receptors, and cytokines and their role in promoting successful pancreatic islet transplantation to cure diabetes. A Ph.D. or M.D. with three years of postdoctoral experience, some of which will be in cell adhesion biology is required.

Individual(s) will have their own projects and work with a team of Surgeons, Pathologists, Cell Biologists, Immunologists, and Biochemists working on ways to improve the *in vitro* and *in vivo* use of islet transplantation. Applicants should have expertise in tissue culture, protein chemistry, and cell adhesion biology and have good written and oral communication skills.

Postdoctoral positions are available immediately to work on the above described projects. The positions are for two to three years with a potential for career advancement.

Please send curriculum vitae along with research interests and the names of three references by May 31, 1998, to:

Research Associate/Postdoctoral
Associate Searches
c/o Marilyn Green
University of Minnesota
Department of Laboratory
Medicine and Pathology
Box 609 Mayo Building
420 Delaware Street
Minneapolis, MN 55455

Or respond directly to Prof. James McCarthy,
e-mail: mcar001@maroon.tc.umn.edu.

The University of Minnesota is an Equal Opportunity
Educator and Employer.

The Toxicology and Molecular Biology Branch of the National Institute for Occupational Safety and Health (NIOSH) is recruiting a **POSTDOCTORAL FELLOW** for studies investigating the molecular mechanisms underlying the dermal response to occupational and environmental toxins, in particular, the early events following chemical elicitation of dermal inflammation and sensitization. Highly motivated postdoctoral candidates with experience in immunology and molecular biology are encouraged to apply. Please send curriculum vitae to:

Ms. Cheryl Fisher
Toxicology and Molecular Biology Branch
National Institute for Occupational Safety
and Health
1095 Willowdale Road
Morgantown, WV 26505
FAX: 304-285-5708

NIOSH is an Equal Opportunity Employer and provides a
smoke-free workplace.

POSTDOCTORAL POSITIONS

Postdoctoral positions are available to study the protein chemistry/enzymology/cell biology/physiology of coagulation and thrombolysis using immunochemical molecular biological, kinetic, and biophysical techniques. Candidates should have a Ph.D. or M.D. with experience in chemistry, biochemistry, genetics, cell biology, or a related field. Send curriculum vitae, a description of research experience and interests, and three letters of reference to: Dr. Kenneth G. Mann, Department of Biochemistry, College of Medicine, University of Vermont, Burlington, VT 05405.

POSTDOCTORAL POSITION is immediately available for a two-year appointment at the University of Washington School of Medicine to study the role of T cells in preventing HIV-1 infection and disease. Strong background in molecular and cellular immunology is preferred. Send curriculum vitae and names of three references to: Dr. Julie McElrath, Program in Infectious Diseases, M 115 Fred Hutchinson Cancer Research Center, 1124 Columbia Street, Seattle, WA 98104. The University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION available in molecular biology. Candidates should have a Ph.D. in molecular biology. Send curriculum vitae to: Dr. Rene Herrera, Department of Biological Sciences, Florida International University, Miami, FL 33199. FAX: 305-348-1259 or -1986.

PREDOCTORAL FELLOWSHIPS IN INFECTIOUS DISEASES/BIOTECHNOLOGY

The Department of Veterinary Pathobiology at the University of Illinois at Urbana-Champaign (UIUC), in conjunction with the Center for Zoonosis Research and Infectious Diseases, is pleased to announce the availability of Predoctoral Fellowships in infectious diseases leading to the Ph.D. degree. These are three-year awards with a salary of \$17,000 per year. The Department and the Center have a long tradition of excellence in biomedical research on infectious diseases spanning the disciplines of virology, bacteriology, immunology, and parasitology at the whole cell, whole animal, and molecular levels. With 14 faculty actively involved in research on infectious diseases, you may select from many exciting research opportunities including molecular mechanisms of pathogenesis, mechanism of disease transmission, host-parasite interactions, and food safety.

Applicants with Bachelor's or advanced degrees are encouraged to apply and will be given equal consideration. For more information or to apply, please contact: Dr. Richard E. Isaacson, Department of Veterinary Pathobiology, 2001 South Lincoln Avenue, Urbana, IL 61802. E-mail: isaacson@uiuc.edu; Telephone: 217-333-7825. Fellows must be U.S. citizens or nationals.

UIUC is an Affirmative Action/Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available immediately to study the regulation of matrix metalloproteinases (*Cancer Res.* 55:2548; *Cancer Res.* 57:3159; *J. Biol. Chem.* 272:29975). Applicants must have a Ph.D. in chemistry or biochemistry and a strong background and expertise in enzymology, protein chemistry, and molecular biology. Past productivity in these areas must be demonstrated in the form of publications in peer-reviewed journals. The research project involves structure-function studies of enzyme domains, biophysical studies of enzyme-inhibitor interactions, enzyme kinetic analysis, site-directed mutagenesis, and recombinant protein expression, purification, and characterization. Send curriculum vitae with list of publications and three letters of reference to: Dr. Rafael Fridman, Department of Pathology, Wayne State University, 540 East Canfield Avenue, Detroit, MI 48201. E-mail: rfridman@med.wayne.edu. WSU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in genetics and molecular biology of neurological mouse mutants. Opening in summer/fall 1998. Projects involve genetic mapping, positional cloning, gene expression, or gene targeting/transgenics. Prefer recent Ph.D. with molecular biology background and familiarity with brain function. Send curriculum vitae, names and telephone numbers of three references, and a statement of research interests by FAX or e-mail to: Wayne N. Frankel, Ph.D., The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609. FAX: 207-288-6077; e-mail: wnf@jax.org.

POSTDOCTORAL POSITIONS are available to study the interrelationships between cytokines in the inflammatory pathway using murine genetics. The epistatic relationships between genes encoding the cytokines and their receptors will be determined using mutant mice that are overexpressors or nulls. Knowledge of mouse genetics and molecular biology is essential. Send applications to: David Hirsh, Columbia University, Box 36, 630 West 168th Street, New York, NY 10032. E-mail: dih1@columbia.edu. Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE. Should have a Ph.D. in cell biology or biochemistry and be interested in photobiological aspects of signal transduction in tumor biology. Experience in electrophoretic/blotting and tissue culture techniques required. Send curriculum vitae to: T. Hasan, Ph.D., Wellman Laboratories of Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114. FAX: 617-726-3191. MGH is an Equal Opportunity Employer; women, minorities, disabled, and veterans are encouraged to apply.

POSITIONS OPEN

TWO TO THREE FACULTY POSITIONS THE BIOMEDICAL ENGINEERING INSTITUTE University of Minnesota

The University of Minnesota invites applications for two to three tenure-track faculty positions in the Biomedical Engineering Institute (BMEI). BMEI is a cooperative enterprise between the biomedical engineering activities of the Medical School and the Institute of Technology. BMEI is supported through recurring funds from the University of Minnesota, a special opportunity award from the Whitaker Foundation, and a substantial endowment. The preference will be to fill the position at the Assistant Professor level although appointments at other levels are possible depending on experience and qualifications. Candidates are sought in the following areas: tissue engineering, biomaterials, molecular/cellular engineering, and biomedical microelectromechanical systems (surgical microsystems or bioanalytic devices). The successful candidate will be expected to have a strong commitment to teaching, develop an independently funded research program, and interact with the local medical device industry. Candidates should have an M.D. or a Ph.D. degree in bioengineering or a relevant field. A letter of application, curriculum vitae, and the names of three professional references should be sent to: Dr. Dennis Polla, Earl Bakken Professor and Head, Biomedical Engineering Institute, Box 368, 420 Delaware Street S.E., Minneapolis, MN 55455. Applications will be reviewed until the positions are filled; all applications received by August 1, 1998 will be considered. For additional information and inquiries about the BMEI visit website: <http://www.bmei.umn.edu>.

The University of Minnesota is an Equal Opportunity
Educator and Employer.

POSTDOCTORAL POSITIONS

Three Postdoctoral positions available immediately in the Division of Nephrology, University of Louisville, in the areas of renal calcium reabsorption, regulation by the calcium sensing receptor, renal phosphate reabsorption, regulation by PTH and dopamine, and chemoattractant receptor signaling. Biochemistry and molecular biology experience required. Please send curriculum vitae, statement of research interests, and names of three references to: Dr. John Arthur (calcium project), Dr. Eleanor Lederer (phosphate project), or Dr. Kenneth McLeish (chemoattractant project), University of Louisville, Kidney Disease Program, 615 South Preston Street, Louisville, KY 40202-1718. E-mail: jarthur@e-mail.kdp-baptist.louisville.edu; e-mail: elederer@e-mail.kdp-baptist.louisville.edu; e-mail: kmcleish@e-mail.kdp-baptist.louisville.edu.

The University of Louisville is an Equal Opportunity Employer.

Immediate opening for a **POSTDOCTORAL RESEARCH FELLOW** to study structures of recombinant analogs of cytoplasmic components of cystic fibrosis transmembrane regulator. We apply electron microscopy and image processing to two-dimensional crystals grown on lipid monolayers. A background in structural biochemistry and familiarity with transmission electron microscopy (desirable but not essential) is expected. Send curriculum vitae to: Dr. Alok Mitra, Assistant Professor, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037. FAX: 619-784-9927; e-mail: mitra@scripps.edu.

POSTDOCTORAL RESEARCH ASSOCIATE position available to study the effect of hepatitis virus mutations on virus replication and pathogenesis of liver disease. Applicants should have a Ph.D. and experience with cell culture, molecular cloning, transient transfection, *in vitro* mutagenesis, and gene expression techniques. Send a description of research experience, curriculum vitae, and names of three references to: Dr. Anna Lok, Division of Gastroenterology, University of Michigan Medical Center, 3912 Taubman Center, Box 0362, Ann Arbor, MI 48109. E-mail: aslok@umich.edu.

GLOBAL OPPORTUNITIES

ARABIAN GULF UNIVERSITY COLLEGE OF MEDICINE & MEDICAL SCIENCES

invites applications for the positions of
Assistant/Associate Professor
in the Departments of:

1. ANATOMY
2. PHYSIOLOGY
3. PHARMACOLOGY &
THERAPEUTICS
4. BIostatISTICS
5. MICROBIOLOGY

The College of Medicine & Medical Sciences of the Arabian Gulf University, which is located in the State of Bahrain, implements an integrated, problem-based curriculum, promoting small group and self-directed learning. The language of instruction is English.

Applicants are expected to have obtained a postgraduate qualification in the relevant discipline (M.Sc. and Ph.D. in case of Biostatistics), followed by a minimum of five years' experience in teaching medical students in that discipline. A medical qualification is desirable for the positions in Anatomy, Physiology, and Microbiology, and essential in Pharmacology & Therapeutics. Experience in tutoring problem-based learning groups would be an advantage. A strong background in Gross Anatomy, with an ability to teach all branches of Human Anatomy, is required for the position in Anatomy. Experience in teaching Therapeutics, ideally in a bedside setting, is required for the position in Pharmacology & Therapeutics. Experience in teaching Biostatistics to undergraduate medical students is essential for the position in Biostatistics. Experience in basic techniques of Molecular Biology applied to bacterial pathogenicity is essential for the position in Microbiology. Applicants are expected to have a record of research and publication, and to be able to contribute to the institution's research activities. Experience in design, conduct, and analysis of field research projects in Family/ or Community Health is essential for the position in Biostatistics. Research experience in the fields of cardiovascular/ respiratory/renal physiology would be an advantage for the position in Physiology. The successful applicants will be appointed to the appropriate level depending on qualifications and experience.

The position carries with it an attractive salary and benefits, which include 60 days paid leave with air tickets to the country of permanent residence annually, housing allowance, and contribution towards expenses of educating the candidate's children in local schools.

Applications with detailed curriculum vitae, together with names, addresses, telephone and facsimile numbers of four referees, should be mailed or faxed to the **Dean, College of Medicine & Medical Sciences, Arabian Gulf University, P.O. Box 22979, Manama, Bahrain; Fax No. (973) 230730**, to reach the College within four weeks of the appearance of this advertisement.

EUROPEAN OPPORTUNITIES

BBC Production

Head of Natural History Unit

Bristol

Salary according to experience

The BBC Natural History Unit is recognised throughout the world for its outstanding and ground breaking programmes which over the past forty years have set the standard for excellence in natural history programming.

The Bristol based unit produces two hundred hours of radio and television output each year in some of the most valued and respected programmes in the BBC's portfolio. For the past five years the department has built its strength and programming excellence under the leadership of Alistair Fothergill who has now decided to return to programme making on a major NHU project. It is crucial to the BBC that an able and talented new department head is appointed to lead and nurture the NHU.

Based in Bristol and reporting to the Chief Executive, Production the Head of the NHU will work closely with the Director of Production in setting strategy to ensure the Unit retains its position as market leader in an increasingly competitive environment. You will be the creative and editorial leader and as head of the department you will be responsible for the work and day to day management of 300 staff working in radio, television and online, and for ensuring the Unit meets its financial objectives. You will be a member of BBC Production's senior management team and play a role in the overall success of BBC Production.

In addition to extensive experience working in natural history production at a senior level you will need a good understanding of the international market place for natural history.

A good salary and benefits package will be offered to the successful candidate.

For job specification and application form contact Sandra Horne on +44 (0)181 576 1376 or email recserv@bbc.co.uk (quoting ref 27651/YJ and giving full name and address.)

Application forms to be returned by Monday, April 27th.

You can also see this vacancy on <http://www.bbc.co.uk/jobs/e27651.shtml> and apply online from our world wide web site.



Working for equality of opportunity

GLOBAL OPPORTUNITIES

The University of the West Indies Mona, Jamaica



ACU

Department of Life Sciences

Applications are invited from suitably qualified persons for the following posts. The successful applicants will be expected to: provide academic leadership in the Department; contribute significantly to the development and teaching of graduate and undergraduate programmes; and be involved in the development of research within the Department.

Chair in Botany

Applicants should have: special expertise in one or more of the following areas: Horticulture, Agroforestry, and Plant Biosystematics and Biodiversity; and a good record in the supervision of graduate students and in undergraduate teaching.

Chair in Zoology

Applicants should have: expertise in some aspect of Marine Biology; and a good record in the supervision of graduate students and in undergraduate teaching.

Detailed applications, giving full particulars of qualifications and experience, date of birth, and names and addresses of three referees should be sent as soon as possible to the: **Assistant Registrar (Centre), Office of Administration, the University of the West Indies, Mona, Kingston 7, Jamaica (fax: (1 876) 977 1422)**, from whom application forms and further particulars of the post, including the salary, are available. Further particulars are also available from the Association of Commonwealth Universities (Advertising), 36 Gordon Square, London WC1H 0PF (tel: 0171 387 8572 Ext. 206; fax: 0171 383 0368; email: appts@acu.ac.uk).

Closing date for receipt of applications: **30 April 1998.**

A member of the Association of Commonwealth Universities

POSITIONS OPEN

POSTDOCTORAL RESEARCH MOUSE MODELS FOR COMPLEX DISEASES

There is an immediate opening for an individual experienced in the application of molecular genetics to biological problems. Collagen-induced arthritis in the mouse provides the paradigm for developing novel formal genetic and transgenic approaches toward understanding polygenic disease susceptibility. McLaughlin Research Institute is a small nonprofit laboratory located near the Rocky Mountain Front and specializes in mouse genetics. This project is in collaboration with **Dr. Leroy Hood** at the University of Washington and travel between the centers provides opportunities for interaction with a larger group. The successful candidate will become a Fellow of the Stowers Institute for Medical Research. Please send curriculum vitae, summary of research experience, and a list of individuals we may contact for references to: **Dr. George A. Carlson, McLaughlin Research Institute, 1520 23rd Street South, Great Falls, MT 59405. FAX: 406-454-6019; e-mail: gac@po.mri.montana.edu.**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available in physiological plant ecology to join an interdisciplinary team at the University of Michigan Biological Station (UMBS) AmeriFlux site. We seek an individual to help design and implement systems for the measurement of carbon, water, and energy flux in a multispecies, forested landscape. Familiarity with the theory and methods for analysis of respiratory CO₂ flux and water flow at different scales is desirable. Start date is June 1, 1998, at \$28,000 per year. Via e-mail, please send curriculum vitae, statement of research interests, and the names and e-mail addresses of three references to: **Dr. Peter S. Curtis, Department of Plant Biology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210-1293. E-mail: curtis.7@osu.edu.** Information about UMBS can be found at website: <http://www.umich.edu/~umbs/> and about AmeriFlux at website: <http://www.esd.ornl.gov/programs/NIGEC/>.

POSTDOCTORAL POSITION

Postdoctoral Fellowship is available at the Department of Gynecology and Obstetrics, Emory University, to study the interaction of pseudo steroid-antioxidants with steroid hormone receptors. Specific skills required are experience in studies on steroid hormone receptors, molecular biology of steroid hormone biochemistry. Candidates with a Ph.D. degree and required skills should send curriculum vitae and three references to: **Dr. Sampath Parthasarathy, Department of Gynecology and Obstetrics, Emory University, 1639 Pierce Drive, Atlanta, GA 30322. E-mail: spartha@emory.edu.**

Emory University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP MOLECULAR BIOLOGY

The University of Colorado invites applications for NIH-supported Postdoctoral Fellowships in molecular biology. Fellow will work on neuroimmunologic aspects of multiple sclerosis. Applicants must be U.S. citizens or hold a permanent resident alien card. Send curriculum vitae and three references to: **Dr. Donald H. Gilden, Professor and Chairman, Department of Neurology, Box B182, 4200 East Ninth Avenue, Denver, CO 80262.**

UCHSC is committed to Equal Opportunity and Affirmative Action.

POSTDOCTORAL POSITIONS available in signal transduction to study kinase and phosphatase regulating NF- κ B, CD28 signaling, JNK kinase cascade, and apoptosis (website: <http://condor.bcm.tmc.edu:80/Micro-Immuno/faculty.tan.html>). Experience in molecular biology is required. Send applications to: **Dr. Tse-Hua Tan, Department of Microbiology and Immunology, M929, Baylor College of Medicine, Houston, TX 77030. Baylor College of Medicine is an Affirmative Action/Equal Opportunity/Equal Access Employer.**

POSTDOCTORAL POSITION is available immediately in a project investigating the aerobic/anaerobic biodegradation of PCBs. Recent Ph.D. with a strong background in microbiology and/or environmental chemistry is preferred. Please send curriculum vitae and a list of three references to: **Dr. G. Y. Rhee, Wadsworth Center, NYS Department of Health, Empire State Plaza, Albany, NY 12201. E-mail: rheeg@wadsworth.org.** Position compensated through Health Research Inc. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



POSTDOCTORAL OPPORTUNITY

A rapidly growing gene therapy company is seeking an energetic and talented individual to work on projects concerning adenovirus gene expression and persistence. Candidates should have a Ph.D. in molecular biology, virology, or related fields. This position offers competitive salary and benefit package. Interested individuals should send a résumé and the names of three references to:

**GenVec, Inc.
Human Resources
Attention: MM
12111 Parklawn Drive
Rockville, MD 20852
FAX: 301-816-0085
E-mail: meyer@genvec.com**

An Equal Opportunity Employer.

POSTDOCTORAL POSITION

The University of Miami School of Medicine, Department of Microbiology and Immunology, invites applicants with Ph.D. or M.D. degrees to apply for a Postdoctoral position to study IL-2 receptor function *in vivo*, including tumor immunity, using transgenic and gene knockout mouse models. Prior experience in immunology and/or receptor signal transduction preferred. Send curriculum vitae, the names and addresses of three references to:

**Dr. Thomas Malek, Professor
Department of Microbiology and Immunology
University of Miami School of Medicine
P.O. Box 016960 (R-138)
Miami, FL 33101**

The University of Miami is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

A Postdoctoral position for research on liver gene therapy and liver stem biology is available in the Department of Molecular and Medical Genetics at Oregon Health and Sciences University in Portland, Oregon. Website: <http://www.ohsu.edu/som/-MedGen/genpage.htm>.

Submit a curriculum vitae and three letters of reference to:

**M. Grompe, M.D.
Associate Professor
Department of Molecular and Medical Genetics,
L103
Oregon Health Sciences University
Portland, OR 97201 USA
E-mail: grompem@ohsu.edu.**

Mayo Clinic POSTDOCTORAL FELLOWSHIP position available immediately to study structure/function relationships in the acyl-CoA dehydrogenase gene family at the molecular, biochemical, and structural level. Applicants should have a Ph.D. in a biological science and will join a stimulating research environment including other postdoctoral trainees and graduate students. Salary commensurate with experience. Send curriculum vitae and the names of three references to: **Jerry Vockley, M.D., Ph.D., Mayo Clinic, Department of Medical Genetics, 200 First Street S.W., Rochester, MN 55905. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS available immediately to study and manipulate mammalian signal transduction pathways. Candidates must have demonstrated expertise in one of the following areas: protein biochemistry, combinatorial or synthetic chemistry, signal transduction, and yeast genetics. Send research interests, curriculum vitae, and three references to: **C. Wilson Xu, Ph.D., Box 362, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. E-mail: xu@frodo.mgh.harvard.edu.**

Memorial Sloan-Kettering Cancer Center is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

NIH Training Program in Diabetes Research

Applications are being accepted for Postdoctoral positions in a multi-investigator program to study diabetes and related endocrine diseases. Trainees will be offered opportunities in the following areas: cellular mechanisms in insulin secretion, insulin action, β -cell growth, autoimmunity, the role of nitric oxide and cytokines, vascular and neurological complications, glucose transporters, biology of aldose reductase, and regulation of gene expression. *U.S. citizenship or permanent resident status is required.* Salary on NIH scale. Curriculum vitae and three letters of recommendations are required. For information, please contact: **Dr. Michael L. McDaniel, Box 8118, Washington University School of Medicine, Department of Pathology, St. Louis, MO 63110. Telephone: 314-362-7435; FAX: 314-362-4096; e-mail: mcdaniel@pathology.wustl.edu.** *Affirmative Action/Equal Opportunity Employer.*

Two **POSTDOCTORAL POSITIONS** (funded by NIH through Health Research) are available to study olfactory toxicity of environmental agents. One will study mechanism of tissue-specific toxicity and molecular approaches to risk assessment in humans, and should have experience in dissection of rodent and human nasal mucosa, nasal toxicity studies in mice, and heterologous expression and purification of P450s for metabolic studies. The other will be involved in characterization of human P450 genes and preparation of transgenic/knockout mouse models and should have experience in molecular cloning and genomic analysis. Salary will be based on NIH standard. Send curriculum vitae and names of three references to: **Dr. Xinxin Ding, Wadsworth Center, New York State Department of Health, Empire State Plaza, Box 509, Albany, NY 12201. E-mail: xding@wadsworth.org.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL/RESEARCH INVESTIGATOR. To join Division of Pulmonary and Critical Care Medicine in an academic medical center. Current research works include cardiopulmonary interactions, mechanisms of inflammation in shock, and neurobiological control of sleep apnea. Applicant should have experience in immunology, molecular biology, cell culture, and monoclonal antibodies. Send curriculum vitae and three letters of reference to: **Harry Steinberg, M.D., Division of Pulmonary and Critical Care Medicine, Room C-20, Long Island Jewish Medical Center, 270-01 76th Avenue, New Hyde Park, NY 11040. FAX: 718-470-1035. LIJMC is the Long Island campus for the Albert Einstein College of Medicine. North Shore-Long Island Jewish Health System is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION

Available immediately for Ph.D. or M.D. in immunology. Research will include studies on cellular and molecular mechanisms of human B cell differentiation (ref. *J. Immunol.* 157:1006, 1996; *J. Immunol.* 159:3757, 1997). Send curriculum vitae to:

**Dr. Y. S. Choi
Laboratory of Cellular Immunology
Alton Ochsner Medical Foundation
1516 Jefferson Highway
New Orleans, LA 70121**

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POSTDOCTORAL POSITION in laboratory studying rheumatoid arthritis: (1) gene therapy; (2) angiogenesis, cell adhesion, and cytokines (*Nature* 376:517; *Science* 258:1798; *J. Clin. Invest.* 101:746). Experience with adenoviral vectors, immunoassays, angiogenesis and cell adhesion assays, arthritis animal models, gene knockout mice, and molecular biology desirable. Send curriculum vitae and three reference names to: **Dr. Alisa Koch, Northwestern University Medical School, Ward 3-315, 303 East Chicago Avenue, Chicago, IL 60611. FAX: 312-503-0994; e-mail: ae-koch@nwu.edu.**

POSTDOCTORAL POSITION available immediately to perform gene therapy studies of inherited retinal degeneration. Molecular biology experience preferred. Please send a description of your research interests, curriculum vitae, and the names of three references to: **Dr. Jean Bennett, University of Pennsylvania, 310 Stellar-Chance Labs, 422 Curie Boulevard, Philadelphia, PA 19104-6069.**

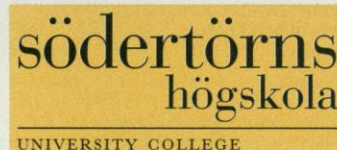
EUROPEAN OPPORTUNITIES

Södertörns högskola is a new Swedish university college, founded in 1996. This fall it will already have grown to about 5 000 students and 250 academic staff and it is planned that Södertörns högskola will become a full university by 2003.

The main campus is situated in Flemingsberg, a suburb 15 km south of Stockholm City with excellent communications and good residential possibilities.

Natural science activities are pursued in close collaboration with the southern campus of the Karolinska Institute which shares the campus. Present activities give a broad coverage of biological and medical sciences with strength in fields such as signal transduction, gene regulation, structural biology and cancer biology. We now offer a great opportunity to participate in the development of new research and education programs in biology.

In the humanities and social sciences, Södertörns högskola is established in most disciplines and has specialised on studies of the transition after the Soviet era in the Baltic Sea region.



Four Assistant/Associate Professorships in Eukaryotic Model Organisms

The positions are attractive for scientists interested in building up a new center, focused on model eukaryotic organisms, that will be located in a custom built building from 1999. The present opportunities are for group leaders in the areas of *C. elegans* (ref no 30/98), *Arabidopsis* (ref no 31/98), Zebra Fish (ref no 32/98) and Mouse (ref no 33/98) genetics to complement existing *Drosophila*, yeast and mouse activities (incl. core facility for ES-cell work, transgenic animals and embryo banking). Successful applicants will be well

supported with supplementary positions and a consumables budget in order to facilitate rapid establishment of strong research groups. Successful applicants will be expected to participate in a new masters program in biology in which studies of the respective model organisms play a key role.

The positions are permanent with the possibility of later conversion to full professor. Both the research and education experience of candidates will be considered. Candidates with a broad zoological or botanical interest will be appreciated. Good command of the Swedish and/or English language is essential.



Enquiries about the positions Inger Porsch-Hällström (+468-58 58 3733, inger.porsch-hallstrom@mednut.ki.se) or Anthony Wright (+468-608 9159, tony.wright@cbl.ki.se). Applications (original+2 copies, marked with the appropriate ref no), including CV, publication list, 10 selected reprints and a summary of previous research and education activities, should be sent by May 11 1998, to Södertörns högskola, Box 4101, S-141 04 Huddinge, Sweden

GLOBAL OPPORTUNITIES



As the oldest tertiary education institution in Hong Kong, the University of Hong Kong has attained unparalleled achievements since 1911 in Hong Kong and the region by drawing on the great cultural traditions of China and the West. The University is a major research institution with nine major faculties and 100+ departments and sub-divisions of studies and learning, and a full- and part-time postgraduate and undergraduate student body of almost 15,000, including 1,900 research students. Our firm commitment to research excellence and internationalisation has established us as one of the top universities in the Region. We are firmly committed to our vision of globalisation and enhancing our research excellence.

Institute of Molecular Biology

Applications are invited for appointment as (1) Principal Investigator (Ref: RF-97/98-51); (2) Investigator (Ref: RF-97/98-52); and (3) Research Officer (Ref: RF-97/98-53) in the Institute of Molecular Biology, tenable from as soon as possible. The appointment will initially be made on a fixed-term basis of 3 years, with a possibility of renewal, subject to satisfactory performance.

The Institute of Molecular Biology at the University of Hong Kong was established in 1989 to promote molecular biology research at the University. In 1995, it moved into its purpose-built accommodation which houses all the essential equipment for recombinant DNA and cell culture experiments, various biochemical, physiological and morphological analysis as well as facilities for transgenic animal development. The University has a sizable community of molecular biologists for exchange of ideas and collaboration.

For Post 1 (Ref: RF-97/98-51): Applicants should be well qualified and experienced scientists with established publication records and have at least ten years' independent research experience in molecular biology and biochemistry. The ideal candidate will have a cutting edge research program related to molecular

virology. Special consideration will be given to individuals working on the development of novel anti-viral agents, e.g. natural products and Chinese herbs. The Institute will provide start up equipment and technical supporting staff but the successful candidate is expected to obtain external grant to supplement support from the Institute.

For Post 2 (Ref: RF-97/98-52): Applicants should be molecular biologists, biochemists or cell biologists with a PhD degree and extensive research experience. The appointee is expected to conduct research in the area of enzymology, lipid metabolism and diabetes.

For Post 3 (Ref: RF-97/98-53): Applicants should possess a PhD degree in biochemistry and protein chemistry. Post-doctoral research experience in molecular cloning and developmental biology would be helpful. The appointee will be responsible for carrying out signal transduction studies during embryonic development.

Annual salaries [attracting 15% (taxable) gratuity] are on the following scales, with starting salary depending on qualifications and experience: Principal Investigator HK\$812,220 - HK\$1,091,100 (9 points: approx. US\$38,577-US\$141,091); Investigator HK\$380,760 - HK\$573,360 (15 points: approx. US\$49,236-US\$112,934); Research Officer HK\$324,300 - HK\$593,100 (9 points: approx. US\$41,934-US\$76,692). US dollar equivalents as at 26 February 1998.

At current rates, salaries tax will not exceed 15% of gross income. The appointments carry leave, medical and dental benefits, an allowance for children's education in Hong Kong, and, in most cases, housing benefits may be provided at a charge of a percentage of salary, currently 7.5%.

Further particulars and application forms can be obtained on WWW at <http://www.hku.hk>; or from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (Fax (852) 2540 6735 or 2559 2058; E-mail: APPTUNIT@REG.HKU.HK). Closes 15 May 1998.

The University is an equal opportunity employer and is working towards a smoke-free environment

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP CD40L-MACROPHAGE INTERACTIONS University of California, San Diego

A Postdoctoral position is available for studies on macrophage immunobiology in the Division of Infectious Diseases of the Department of Medicine and the University of California, San Diego AIDS Research Institute. Building on our recent finding that CD40L activates macrophages to produce HIV-suppressive beta-chemokines (PNAS, in press), we are evaluating the regulation of CD40L on T cells in HIV infection, tuberculosis, and malignancy. These studies utilize a variety of molecular, immunological, biochemical, and microbiological approaches in a modern, well-equipped laboratory. The successful candidate will have a broad knowledge of current biomedical research, a strong foundation in immunology and molecular biology, dedication, a positive attitude, and a desire to learn in a challenging but supportive environment. *Candidates must be U.S. citizens or permanent residents.* Send a statement of research experience, interests, and future plans, curriculum vitae, and the names and telephone numbers of three references to: **Richard S. Kornbluth, M.D., Ph.D., Department of Medicine—0679, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0679. FAX: 619-552-7445; e-mail: rkornbluth@ucsd.edu.**

POSTDOCTORAL POSITION with **Dr. Ravi Bhatia**. The Department of Hematology/Bone Marrow Transplantation at the City of Hope National Medical Center/Beckman Research Institute seeks a Research Fellow to study abnormalities in regulation of hematopoiesis in leukemia. These studies are directed toward understanding mechanisms of abnormal microenvironmental, especially adhesion-mediated, regulation of primitive hematopoietic progenitor proliferation, differentiation, and survival. There is significant interest in translation of laboratory research to clinical applications. Candidates should have a Ph.D. or M.D. degree. A background in molecular biology and/or signal transduction is preferred. Experience in sterile cell culture and FACS sorting is desirable. Interested candidates should send curriculum vitae, a summary of research experience/interests, and contact information of three references to: **Shelley Tam, Senior Recruiter, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, CA 91010. FAX: 626-301-8182; e-mail: cohapply@smtpink.coh.org.** Please reference #16721. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available at Children's Hospital Los Angeles Research Institute (University of Southern California) for an NIH-sponsored research to study vascular endothelial cell signaling with endotoxin and other soluble microbial proteins pertaining to sepsis or various systemic infections. Applicants should have a Ph.D. with solid knowledge, background, and two to three years of experience in signal transduction, endothelial cell biology, molecular/cellular biology, and transfection/protein overexpression. Send curriculum vitae and names of three references to: **Dr. Moshe Arditi, Division of Infectious Diseases, MS# 51, Children's Hospital Los Angeles, 4650 Sunset Boulevard, Los Angeles, CA 90027. FAX: 213-660-2661; e-mail: marditi@smtpgate@chla.usc.edu.**

POSTDOCTORAL POSITION for experimental tumor therapy projects to study radioimmunoconjugates and chemotherapeutics in animal models, hematopoietic toxicity and recovery, tumor vascular physiology, and application of immunodetection and immunotherapy to non-tumor pathophysiological conditions. Ph.D. with zero to three years of experience and knowledge in several of the following areas: immunology, cell biology, hematology. Starting salary is \$22,000 to \$28,000, depending on experience, with possible future faculty opportunity. Send curriculum vitae and three references to: **Dr. Rosalyn Blumenthal, Director of Tumor Biology, Garden State Cancer Center, 520 Bellevue Avenue, Belleville, NJ 07109. FAX: 973-844-7020.**

POSTDOCTORAL POSITION. Apply cellular and molecular biology techniques to study spinal cord pharmacology and regulation of cardiovascular system. Ph.D. in molecular biology or related field and experience with cellular and molecular biology approaches broadly related to neurobiology of the central nervous system and cardiovascular diseases as demonstrated in publications. Send curriculum vitae and names of three references to: **Dr. Pan, Anesthesiology Department, Wake Forest University School of Medicine, Winston-Salem, NC 27157. E-mail: hpan@bgsu.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS. The Department of Plant Pathology has four research position openings to work on novel approaches for control of plant pathogenic oomycetes using the downy mildew of *Nicotiana* spp as a model system:

(1) Expression of fungal and mycovirus-encoded antifungal polypeptides in transgenic plants (Dr. Said A. Ghabrial, Principal Investigator, e-mail: saghab00@pop.uky.edu).

(2) Regulatory genes involved in systemic acquired resistance (Dr. Christopher L. Schardl, Principal Investigator, e-mail: schardl@pop.uky.edu).

(3) Development of molecular markers for epidemiological and population studies of *Peronospora tabacina* (Dr. Maik L. Farman, Principal Investigator, e-mail: farman@pop.uky.edu).

(4) Cloning and functional characterization of disease resistance genes (Dr. Qingshun (Quinn) Li, Principal Investigator, e-mail: agr022@pop.uky.edu; Dr. Mark L. Farman, Co-Principal Investigator).

Send curriculum vitae with brief statement of research background and interest with names of three references directed to the appropriate Principal Investigator at: Department of Plant Pathology, University of Kentucky, Lexington, KY 40546. FAX: 606-323-1961; website: <http://www.ca.uky.edu/agcollege/plantpathology/ppdept.html>.

The University of Kentucky is an Equal Opportunity Employer.

POSTDOCTORAL POSITION YALE UNIVERSITY Department of Molecular, Cellular, and Developmental Biology

Investigate molecular mechanisms of axon guidance, including the role of CAMs and signal transduction pathways in regulating cytoskeletal protein dynamics using combined molecular and biophysical approach. Strong background in biochemistry and/or biophysics required; interest in optical techniques helpful. Send curriculum vitae and three letters of reference to: **Dr. Paul Forscher, Department of Molecular, Cellular, and Developmental Biology, Yale University, P.O. Box 208103, New Haven, CT 06520.**

GRANTS

PARKINSON RESEARCH GRANTS 1998-1999

The National Parkinson Foundation announces a special program for innovative research on Parkinson's disease and related disorders. Up to 25 grants specifically aimed at translating new and innovative research into funded NIH awards will be made. Maximum award is \$30,000.00. We specifically encourage young Investigators new to the field with novel creative research ideas relating to neurodegenerative disorders. Deadline for submission of applications is July 15, 1998. Awards will be announced September 15, 1998. To obtain submission information please write to:

**Paula Conley
Programs and Grants Administrator
National Parkinson Foundation
1501 N.W. 9th Avenue
Miami, FL 33136**

POSTDOCTORAL POSITIONS to be supported by a training grant are available in hormones, biochemistry, and molecular biology. Candidates must have Ph.D. or M.D. and be a citizen or noncitizen national of the United States or must have been lawfully admitted for permanent residence. Interested candidates should e-mail: francos@cudept.cis.columbia.edu for mentors list of potential sponsors. *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

COURSES & TRAINING

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SYMPOSIUM

MOLECULAR INTERACTION TECHNOLOGIES 1998. October 19-20, 1998, Cathedral Hill Hotel, San Francisco. Keynote: **S. Schreiber**, Harvard. Speakers: **C. Barbas**, Scripps; **P. Bartel**, Myriad; **H. Blau**, Stanford; **R. Brent**, UCB; **J. Broach**, Princeton; **G. Crabtree**, Stanford; **R. Cramer**, Switzerland; **W. Dower**, Affymax; **S. Fields**, University of Washington; **M. Gilman**, Ariad; **H. Hoogenboom**, Netherlands; **J. Kochan**, Hoffmann-La Roche; **P. Legrain**, Institute Pasteur; **L. Loeb**, University of Washington; **G. Nolan**, Stanford; **C. Pabo**, Princeton; **A. Plückthun**, Zurich; **D. Payan**, Rigel; **M. Roth**, Tularik; **G. Rubin**, UCB; **E. Ruoslahti**, Burnham Institute; **R. Sauer**, MIT; **P. Schultz**, UCB; **P. Sternberg**, Cal Tech; **J. Thorner**, UCB; **R. Tsien**, UCSF; **M. Vidal**, MGH; **J. Wells**, Genentech; **M. Wickens**, University of Wisconsin; **K. Xanthopoulos**, Aurora. Abstracts due August 31, 1998. Organizers: **S. Fields**, **R. Balint**, **J. Larrick**. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 650-694-1420; FAX: 650-694-7717; e-mail: paimm@netgate.net; website: www.pano.com/paimm.

ANNOUNCEMENT

PROJECT LEADER (Announcement: Early Alert). The USDA, Forest Service seeks a **RESEARCH ENTOMOLOGIST** (GS-13/14) to direct the Wood Products Insect Research Unit, Starkville, Mississippi. Candidates must have knowledge of forest ecology and insect biology and behavior. To receive an announcement packet, send curriculum vitae to: **Dr. Robert L. Doudrick, Southern Institute of Forest Genetics, USDA Forest Service, 23332 Highway 67, Saurier, MS 39574. Or Telephone: 228-832-2747** for position information. *We are an Equal Opportunity Employer.*

EUROPEAN OPPORTUNITIES

THE UNIVERSITY OF HEIDELBERG FACULTY OF CHEMISTRY CHAIR OF INORGANIC CHEMISTRY

The Faculty of Chemistry of the University of Heidelberg invites applications for a Chair of Inorganic Chemistry (C4 Professor). The candidates are expected to participate in the teaching activities of the Institute of Inorganic Chemistry, including introductory and advanced courses and exams for students of chemistry and science in general.

The successful applicant is expected to lead a powerful research group in any branch of inorganic chemistry and to have a strong interest in interdisciplinary cooperations.

Applications should be sent by May 20, 1998, to: **De kanat der Fakultät für Chemie, Im Neuenheimer Feld 234, Heidelberg D-69120 Germany.**

The university attempts to increase the number of woman scientists and therefore encourages applications from women with the appropriate qualifications.

MAX-PLANCK-INSTITUTE FOR CHEMICAL ECOLOGY

POSTDOCTORAL POSITION available to study the biochemistry and molecular regulation of plant defense metabolism. Experience in plant enzymology and molecular biology are desirable. The institute is international in character with English the official language. Applications are invited for both German and non-German nationals. Please send curriculum vitae and names of three references to: **Jonathan Gershenzon, Max-Planck-Institut für chemische Ökologie, Tatzendpromenade 1a, Jena D-07745 Germany. FAX: +49-3641-64-3650.**


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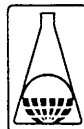
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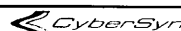
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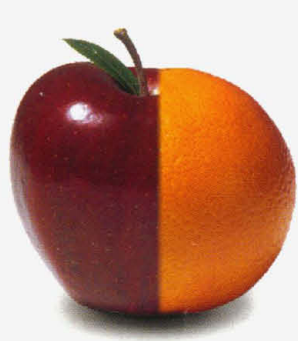
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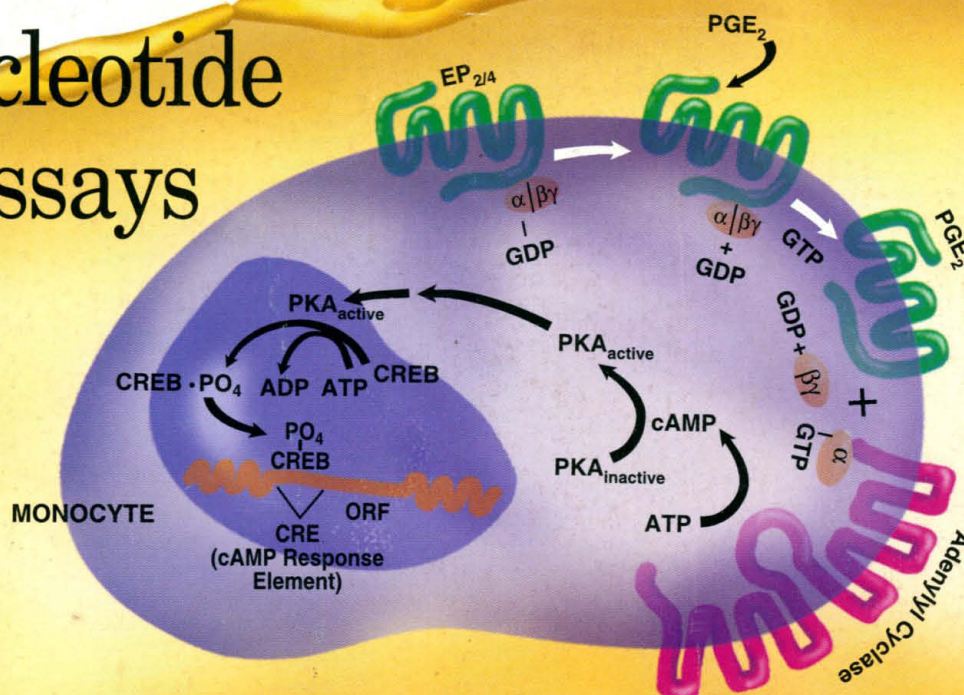
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6-keto-PGF _{1α}	DE0800	16 – 50,000	1.40	2.75
PGF _{2α}	DE1100	12.2 – 50,000	4.62	2.75
8-iso-PGF _{2α}	DE0900	24 – 100,000	12.30	2.75
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